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## THE DIFFICULTY OF THE HIGH-SCHOOL LIBRARY, AND A SUGGESTION

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The editorial in the *School Review* of December, 1906, the article in the *Educational Review* of February, 1907, by William Newham Carlton, numerous references to the subject in the professional press, and many papers read before educational clubs and societies, are indications that the high schools are becoming alive to their own special library problem.

Library problems are mainly problems of money. It is very well to have in mind such a library in the high school as the above-mentioned editorial suggests, but it would cost very much more than high schools as a rule are prepared to spend. A thousand dollars expended for laboratory equipment will make some show, but the same amount devoted to the library will be hardly more than a beginning. A high-school library, to contain the books, first of all, to be used in connection with the studies of the school should certainly have about three or four thousand volumes. Probably a good working high-school library would have five thousand volumes. The books for such a library would cost from six to seven thousand dollars. The public libraries have proved that a certain amount of preparation is needed to change a miscellaneous lot of books into a library. This preparation is now pretty uniform and involves a great amount of detail. At the Albany Library School two

years are required to teach a college graduate how to make and administer a library. However great the learning and culture may be, one cannot with any show of economy establish a library without this knowledge. In addition to the books, magazines, and general library equipment, there must therefore be a trained librarian, and this very few high schools realize. The teachers of literature, aided by pupils, cannot organize a library. Not until these facts are fully appreciated can a high school have a good working library. Moreover, a library is not maintained free of cost. The librarian's salary, new books, rebinding, supplies, and magazines are all costly but necessary items.

It is just as well to look such facts in the face when we discuss libraries for high schools. We may well question if it is worth while to have such a library at all. Could not this money be administered to better advantage for the schools in other ways? Frankly, I do not profess to have a decided opinion as to this point.

In the *Educational Review* for February Mr. William Newham Carlton has this to say:

† The municipal and town libraries are now in such close touch with the secondary schools that the pupils have every opportunity to acquire a knowledge of the more general and universal bibliographical tools and literary aids. Well-trained assistants in scores of reference rooms are actually imparting this information to hundreds of scholars from the public and private schools of their localities. This instruction might *profitably be made more regular and formal by arrangement with the school authorities*; it is my belief that it would be accepted more readily and more seriously by students of high-school age than by those who have entered college; and such instruction would carry the average student just as far in knowledge of and ability to use the common bibliographical works as an elementary college course in bibliography.

The italics are my own, and I desire to emphasize them to the fullest possible extent. If the school and library authorities will make some arrangement for the public library to meet the wishes of the school, it is evident that much good will be accomplished without the duplication of a great deal of material. As such a burden would add materially to the expenses of the public library, it would be only fair for the school authorities to see that

the appropriating body of the town take this into consideration when making the annual budget.

Public libraries in this country have done and are doing a great deal of work in connection with the schools, mainly the public elementary schools. Very little of this is organized.

Perhaps a brief statement of work with public elementary schools may be cited as suggestive of a possible solution of the high-school library problem.

In all of the public schools, elementary and high, in the city of New York, the Public Library has, with the approval of the Board of Education, erected a large bulletin board, lettered "Public Library Bulletin." On this bulletin board there is a permanent notice giving the address of the nearest branch library, and a list of all other branches. On this permanent notice are the special library rules, devised to give teachers the utmost possible freedom of books. From time to time notices of new books, new rules—or rather the abolishment of old rules—notice of special interest to the teachers and pupils, etc., are posted. In particular, however, the bulletin boards were erected to bring notices to the teachers of the grades, which notices it is expected will bring the libraries and the schools into a closer relationship. A special placard is printed, enough copies are sent to every school to post one for each of the upper five grades in each classroom, to post one on the "Public Library Bulletin," and to give a set to the principal. The placards read as follows:

THE BRANCH OF THIS LIBRARY LOCATED AT . . . will be prepared to give special attention to pupils in this grade who desire to consult books of reference in connection with their grade work.

Term plans as published in recent issues of *School Work* and of *New York Teachers' Monographs* will be used as a basis for the preparation of material which will be set aside in the library for the use of pupils between the dates indicated in the following schedule. [Then follows a schedule of subjects provided in the course of study, for each of the five grades, a separate card being printed for each grade. The card then continues:] This is a tentative effort to bring the schools, the museums, and the branch libraries into a closer relationship.

Upon consultation with the librarian of the branch library, arrangements may be made for a considerable deviation from this schedule, both as to date and as to subject.

The use of indexes, tables of contents, catalogues, etc., will be explained to pupils when necessary.

Pupils of this class are invited to use the library. They will be made welcome, and will find many delightful stories and attractive books on a wide variety of subjects of particular interest to boys and girls. These and other books may be borrowed for their own use at home and for their parents.

In addition to books printed in the English language, the library has collections printed in many foreign languages, and for the blind.

The library is always glad to send applications to teachers for distribution in the classrooms.

Reference to the museums is made by giving as footnotes to the subjects indicated in the graded schedules brief descriptions of some of the exhibits in the museums and in other places in the city which bear on the work of the grade. For example, one such footnote reads as follows:

NOTE.—In the Foyer or Entrance Hall of the American Museum of Natural History, Seventy-seventh Street and Central Park West, there is an exhibit illustrating the solar system. Suspended in the center of this hall is a five-inch incandescent globe, representing the sun. Standing directly beneath this, one may see other globes corresponding to the various planets of the solar system, which are installed in such a manner as to show the relative size of each and also its relative distance from the sun.

Thus, therefore, the library has supplied each classroom of the upper elementary grades with a placard on which is an invitation to use the nearest branch, a statement that the library will render special aid in connection with the graded work, and statements concerning other interesting features of the city of special interest to the child of that particular grade.

I go to some length to describe these details in order to suggest that something of the kind could and should be done by the libraries for the high schools. This has been suggested to each of the high-school principals of this city. I understand that the matter is to be presented to the High School Principals' Association for action. The library has asked the principals to indicate along what lines its branches can be made of the most use to the students. The recommendations of the principals will be given the utmost consideration. It is hoped that some uniform scheme of co-operation may be worked out.



It is probable that the relations between the libraries and the high schools will grow closer and closer. The libraries, for example, need junior assistants with a certain amount of library training. The technical high schools could well afford a class in library economy if a library of the town would recognize this training as equal to the first year of work in the library, as equal to one-half of the time given in the apprentice class of the library, etc. If the library has a certain amount of oversight of the high-school training class, it is probable that the school could make very good terms for its graduates. The practical work of such a class should be done in the public library.

If a high school can afford a library that is really a library, undoubtedly it would be for the good of the school to have one, large, sunny, and bright, with well-designed and comfortable furniture, and with just the right books and magazines for the boys and girls. But what would the hours of opening be for such a library—from 9 A. M. to 9 P. M.? On Saturdays and holidays and in the summer would this library be open to the students? If not, the waste would be very great.

The public library is a part of the life which the high schools are fitting the students to understand and appreciate. It is to the public library that they must go in after-life for the majority of their researches and special studies. The public library is gradually becoming a working-tool for high-school graduates, and it would seem that the high schools should teach the use of that tool, not of another tool, the high-school library, which will be left behind on the day of graduation. Much, of course, may be learned of libraries and library method in the high-school library, but the library habit, the habit of going to the public library for all sorts of information of little or of great interest, cannot be acquired from the high-school library; and it is this habit which the high schools should do all in their power to form. It may almost be said that the good high-school library, duplicating a good public library in part, may be a very good thing for the school, but for the pupils its influence would be regrettable.

Let no one gather from this article that I would advocate

the abolishment of the high-school library. On the contrary, it should be developed along lines which, so far as my information is concerned, do not seem to be formulated. Certainly present methods should not be tolerated, nor yet should the high schools seek to duplicate the work of the public library.

## A SUCCESSFUL HIGH-SCHOOL LIBRARY<sup>1</sup>

C. C. PARLIN

Principal of the High School, Wausau, Wis.

This fall we took the best room in the Wausau High School building and made it into a library. Our reason for doing so was the unsatisfactory results of keeping the books in the Assembly Hall. The new room is of ample size, lighted by six south windows, and ventilated by two flues leading from the fan-room. We had the walls tinted a sage-green, the light oak woodwork done over into golden oak, the electric fixtures replaced by Nernst lamps, and a cork carpet put on the floor. Our manual-training department constructed some book-stacks of golden oak to match the woodwork, arranging them in alcoves and having an eye to aesthetic effect as well as to utility; it is also making tables, and a librarian's desk to replace those now in use, in order that all the furnishings may be in harmony. The athletic association loaned its trophy cups to adorn the cases, the pupils collected funds to buy plants, and I gave a popular lecture and raised fifty dollars to purchase some suitable pictures.

In these pleasant quarters we housed our library and in charge of it placed a librarian. To keep the initial expense within moderate limits, we employed a young lady who had had only a little library training, but who planned to make library work her vocation, and whose services we were able to secure for twenty dollars per month by allowing her two periods a day to complete her work for graduation. Though she had not the training we should have liked, yet, having come up through our school, she had the advantage of being familiar with our library and our methods of using it.

The library is open on school days from 8:15 A. M. to 5 P. M., and on Saturdays from 9 A. M. to 12 M. A teacher is in charge the two periods which the librarian is off duty, and a senior student is in charge during the noon hour.

<sup>1</sup> See frontispiece.

In number of volumes the library is not especially remarkable, our annual appropriation being about two hundred dollars, but it is strong in United States history. Our magazines, for which we have an appropriation of thirty dollars, are also kept in the library room, but during school hours pupils are allowed to use the library for reference work only; that is, neither textbook work nor magazine-reading may be done in the library during school hours except by special permission.

The card catalogue of the library is complete as to author and title-cards. We are working on a set of subject analytic cards which will not only refer the student to a few books on the subject in hand, but will also furnish page-references to a considerable number of works; we plan to include, not only such subjects as are found in the A. L. A. list, but also the names of important persons and places. It is a large task, but by the co-operation of teachers and pupils we hope to accomplish at least a part of it.

A pupil desiring to go to the library hands the teacher from whose charge he is departing a slip stating his name, the exact time of leaving, and the subject on which he proposes to read, and upon reaching the library hands the librarian a duplicate slip. Upon leaving the library the pupil hands the librarian a similar slip, and gives the teacher to whom he returns a duplicate. The teachers return their slips to the librarian, who checks them over and reports discrepancies to the principal's office. The slips are furnished in printed form; the pupils buying at one cent a pad the white slips used in going to the library and the school furnishing gratis the red slips used in returning from the library.

In the library absolute order is maintained at all times, no pupil being allowed to speak to another pupil except by special permission of the librarian. These regulations, you may say, allow too little freedom. They are rigid and are strictly enforced, but we want no possible misunderstanding in the mind of anybody of the fact that the library is not a place to loaf and visit, but a place to *work*. That the strict regulations do not unduly discourage pupils from the use of the library may be inferred from the fact that a record taken for eight consecutive school

days showed that on the average 147 pupils read in the library daily.

Reference works alone compose the library, our other books having been given to the Wausau Public Library several years ago. So the books are for the most part read in the library room; but books may be drawn from the library at 4:45 P. M., to be returned not later than 8:30 A. M. next day. For an infraction of this rule a pupil is blacklisted and not allowed to draw books for two weeks.

Under these circumstances the condition of the books is unexceptionable. They can always be accounted for, and are no longer found with disheveled leaves and torn covers.

The conduct of the pupils too has improved; for the one serious source of disorder was removed when the reading-tables left the Assembly Hall. When the faculty met, as they are accustomed to do once in six weeks, to estimate the conduct of pupils for the encouragement of their parents, the teachers unanimously voted nearly everybody "excellent" which caused one of the teachers to exclaim: "Is the millennium at hand?" From the standpoint of the Assembly Hall alone, the better conditions for study, and the saving in wear and tear on the teachers' nerves, are worth all the library costs.

Teachers have a much more accurate measure of the library work done for them by their pupils. This may be made more clear by a concrete illustration. Johnny Jones, arriving at the library, hands the librarian a slip stating that he arrives January 7, 8:30 A. M., and proposes to read Greek history. Now the librarian has, in her catalogue case, a card headed "Johnny Jones—Greek history." On this card she records, "January 7, 8:30." Later Johnny hands in his leaving-slip, stating that he is leaving the library January 7, 9:10 A. M., and has read Greek history. The librarian then completes his record on the card so that it now reads, "January 7, 8:30-9:10, 40 minutes." Now, if the teacher of Greek history comes along at 10:30 A. M., he may see just how much time Johnny spent in the library preparing for his lesson today, and by a little computation the teacher can discover how much time Johnny has actually spent in the

library on Greek history for the past week or semester. Pupils who take books home are asked upon returning the books how much time was spent in reading them, and their estimates are recorded in a separate column headed "Home Readings," so that the teacher of Greek history may obtain a record both of the time Johnny Jones spent in the library and of the time he professed to have spent at home on books from the reference library.

If, at first, the library appeared to anyone as an experiment—possibly a fad—it has certainly proved conclusively that it is worth more than it costs, and funds for its continued maintenance and improvement will be cheerfully voted by the Board of Education.

## MY STRUGGLE WITH THE ITALIAN LANGUAGE AND THE MORALS I DREW FROM IT FOR THE TEACH- ING OF MATHEMATICS

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Not the least of the advantages which the summer sessions of quite a number of our universities have offered teachers has been the mere fact of sitting once more in the classroom as learners; the opportunity, after much experience in teaching, of again passing through the process of being taught. Good teachers are constantly trying to appreciate the point of view of their pupils, and as constantly realizing how imperfectly, in the very nature of things, they can ever hope to succeed. But actually to enter the classroom again as a student, day after day and week after week, certainly gives the teacher a more vivid and real picture of the attitude of mind of his own pupils than could any imagining in his study or at the teacher's desk. True, it no more gives him a reproduction of the youthful mental processes than a later ocean voyage can reproduce the indescribable charm and novelty of the first, but it unquestionably brings him a long step nearer to realizing what these mental processes must be.

The teachers of whom I have been speaking study, perhaps without exception, advanced work in the field in which they have already taught. A still closer approach to the position of the pupil would be made if the teacher were to take up some new subject as a *beginner*.

This opportunity came to me a few months ago when I began the study of Italian. Intent only on getting a practical start in the language as rapidly and easily as I could, I was perhaps transplanted, as nearly as is now possible for me, to the position of the secondary-school pupil, and in the course of the work a number of my experiences forced me to think of the beginner in mathematics and of how he should be taught in analogous cases.

The wide divergence in matter, method, and purpose of study between mathematics and conversational Italian is obvious; still the fundamental acts of learning are sufficiently similar to compel me to give certain measures of weight to the mathematical morals drawn. What that measure of weight should be, each reader may determine for himself.

By no means do all the inferences corroborate the views I have already formed as to the teaching of mathematics, and when they do not, the diversity of the subjects is especially comforting.

1. *The beginning.*—My beginning was not with simple but useless and colorless sentences like "The man is tall," "The fire is hot," which teach only words, but with a long phrase, packed full of idiomatic expressions, having indicatives, subjunctives, potentials, infinitives, and the various parts of speech, all in evidence; given without vocabulary or grammatical explanations, but simply with a free and a word-for-word translation, together with the pronunciation of the Italian. The novelty of the whole impressed this phrase indelibly upon my mind without any effort, and its characteristic idioms came into constant use as soon as I had occasion to speak Italian.

Could we not in mathematics utilize the lasting character of first impressions more fully than we do? Could we not in the very first class exercise take up a characteristic example that would get to the heart of the subject or topic, show what it is good for? Does not this fix in the mind of the pupil some of the things we wish him to have constantly at hand, better than if the first exercise is devoted to a preliminary discussion of definitions and principles—putting up a scaffolding, as it were?

In other words, if house-building is to be taught to one who has never even seen a house, first *show* him a completed house, take him through it, let him see that a house is a good thing to have, and hence a good thing to build; next let him see what are the most obvious requisites for building a house; then the requisites for these, etc.

This will surely prove more effective than to say: "We propose to study house-building. The materials out of which a



house is constructed are: stones, sand, lime, hair, wood, iron, white lead, oil, colors, glass, etc., etc. The various sorts, qualities, and shapes of stone used are . . . etc., etc."

2. *Not many* expressions were given, but those given were typical and flexible—models that could be adapted to many occasions. Whether I was seeking a permit from the minister of education, or whether I was explaining to a station master a complicated transaction on a train, it was surprising to find how aptly the models fitted in.

The mathematical moral is obvious. If the pupil masters well-chosen *types*, he will readily handle their variations, and other types of the same general character, when occasion arises. Let not the teacher think, for example, that he must, first and foremost, put his pupils through every possible "case" of factoring, or every conceivable style of problem in long division. If the pupils grasp the fundamental idea as exemplified in some well-chosen problems the rest will take care of itself. The growing range of knowledge of the subject and increasing dexterity in its manipulations will *of itself* furnish a wider field for application of the process in question.

3. *Few classified lists* of names of objects were given; no lists of colors, furniture, edibles, etc. Names are inevitably learned in dealing with the things themselves. The same is true in a large measure of verbs. What should be learned, through suitably selected examples, is the ready and idiomatic use of adverbs and prepositions, and this not in the artificially simple forms of the lesson-book, but in the somewhat complicated phrases of actual practice. In this connection many important nouns, adjectives, and verbs would also be learned.

So in mathematics, the aim should not be at once to define and master *all* the concepts and operations of the subject or topic in hand, but rather to learn to handle some of them effectively. This once accomplished, mere extension of the subject-matter is easy.

4. *The active phase* of the use of the language, the expression of my own thoughts, in some fashion or other, was decidedly easier than the more passive act of understanding the expressions

of others. Especial and prolonged effort was needed to train the ear to understand spoken Italian.

It is obvious that at this point no close parallel can be drawn with mathematics. The interpretation would, of course, be that the pupil along with his active work—thinking and expressing his own mathematical thoughts—should also receive extended training in grasping the mathematical ideas expressed by others. In the proper reaction from a mode of instruction in which the pupil was an entirely passive learner, some have gone to the opposite extreme and sought to have him grow all his mathematics himself. This plan surely achieves the ends of the study of mathematics better than the other, but perhaps a combination of both would really be the golden mean.

5. *Much reading* of all sorts—newspapers, manifestos on the walls, novels, plays, in which the aim was to get the essence without worrying about words and phrases not understood—did more than anything else to accomplish precisely that which was apparently neglected, namely, to enlarge my stock of words and phrases, and to give a feeling of acquaintance with the usages of the language.

This suggests the question whether the precision itself of mathematical attainment may not at times be best strengthened by not delaying to insist on mastery of all details; whether there are not in mathematics certain benefits which pupils can derive best by cursorily going over large quantities of mathematics, in their own reading, in hearing reports on work done by other members of the class and through sketches of various domains of mathematics given by the teacher.

6. *Paradigms, the dictionary, and grammatical rules* were incidental aids, not dominating ends. For example, after many instances of use of different forms of a verb, it was finally an aid, a simplification, to have them all drawn up in a classified table. On rare occasions, when the Italian equivalent of an English word was urgently needed, or when some Italian word aggravatingly persisted in not unmasking itself, the dictionary afforded relief. Rules of grammar described the linguistic usages already observed, just as the guidebook described the material

objects of interest already seen. And, like the guidebook, the rules of grammar often drew attention to things of interest which would otherwise have escaped notice.

In mathematics, likewise, definitions, rules, schematic enumeration of types and cases should be aids, not ends; useful outgrowths of the work, not the basis of it.

7. *The relation of Italian to French* was of value only indirectly. The very similarity of the two made it necessary to repress the French which had quite a footing in my mind, and when this was once done in a measure, it was difficult to resume it at a moment's notice. To illustrate: An Italian professor with whom I was conversing on educational questions, fearing that I was not following perfectly what he was saying, was good enough to turn the conversation into French, and, though I undoubtedly understood him better, I found to my great mortification that the French words which had been so obtrusive when not wanted, now refused to come at all.

In mathematics, we have of late years justly been laying much stress on closer relations between the various subjects which we in America have unpedagogically kept completely separated, not only in matter, but also in time. The experience just recorded is only an instance of the well-known fact that it is hard for the mind to turn from one subject to another, especially when the first is difficult and engrossing all the mind's energies. The mathematical subjects should surely be brought into closer connection, but not in a merely mechanical way. To turn from one to the other on the word of command, to give such days of the week to algebra and such to geometry, is an attempt that seems psychologically foredoomed to failure. The real interrelations between the subjects must be sought out and followed; the turn from one to the other made when there is inherent reason for doing so, and not arbitrarily; only so can the mental friction and loss of energy attendant upon diversion of unsatisfied attention from one field of thought to another be reduced, if not eliminated, and the hope cherished of bringing the various branches of secondary mathematics into their due relationship as parts of one great edifice.

8. In Italy, I took a few lessons, my beginning having been made in America by private study following an excellent book of exercises. I appreciate as keenly as anyone the paramount importance of the living teacher, but I also realized afresh that almost every teacher ought to make a good text a part of his work; such a part as his own experience and the needs of his pupils may dictate. The success of a course in Italian, like that of a course in mathematics, is largely made or marred by the selection of the materials; and it is clear that no teacher can give to such selection for one class or a few pupils the same thought, time, and labor that a writer will bestow upon a book intended for thousands of classes and tens of thousands of pupils.

9. I spoke at the outset of my "struggle" with Italian and such it would surely have been had I approached it by the door of grammatical system, trying to learn all possible forms before using any. As it was, theory being the handmaid of practice, the work was a pleasure throughout. The practical use that I might make of the language was not needed as a spur to work; but the pleasure of meeting and conquering difficulties, the consciousness of growing strength, the desire to see what was coming next, the opening-up of a new literature with its portrayal of the life and culture of a people hitherto known only at second hand, were sufficient incentives.

Mathematics, likewise, which many approach with forebodings of a dreary struggle, has even greater possibilities of interest. With its peculiarly satisfying type of mental activity, with its vast body of clear-cut and interesting facts, with its exemplifications on all hands in the material universe, mathematics may, if only here too theory be made the handmaid of practice, be so presented that even he who approaches it in the anticipation of a struggle shall leave it with recollections of pleasure.

## EXISTING CONDITIONS IN THE TEACHING OF ENGLISH

CYRUS LAURON HOOPER

Murray F. Tuley High School, Chicago

In the autumn of 1905 a few Chicago teachers, under the leadership of Mr. James F. Hosis, of the Normal School, formed a social-professional club for the purpose of studying current problems of English teaching, and, if possible, of disseminating information regarding them. It became the ambition of the club to encourage the formation of similar organizations, and to be one of many clearing-houses of ideas on the subjects in hand. To these ends, committees on Reading and Literature, Grammar and Composition, Oral Expression, Libraries, Continuity, Current Literature, English in Other Places, Social Affairs, and Finance were appointed, meetings were begun, investigations were instituted, and reports were prepared.

Little, perhaps, has been done in the way of dissemination, one paper only, that of Miss Peet on "Libraries," having been published; but the reports and discussions were enlightening, notably those of outsiders, as Mr. Shuman, of the *Chicago Evening Post*, and Dr. McClintock, of the University of Chicago; and the investigations are being continued with the original ends in view.

From the first it has been the purpose of the Club to find out the existing conditions, and what is being done in the matter of English teaching, rather than what ought to be done. With this purpose in mind, the present writer, as chairman of the Committee on English in Other Places, undertook, with the aid of his associates, to find out what conditions prevail, and what is going on elsewhere than in Chicago. As the membership of the club consists of grade teachers, high-school teachers, normal-school teachers, principals, college professors, and any others who are interested in English teaching, the requests for suitable ques-

tions to be sent to other cities should have been numerous, and varied in character. There seemed to be a disposition, however, to let each committee work out its own problems; and the result is that there is a greater number of questions concerning high schools than grammar schools, for the list was prepared mainly by the chairman of the committee, who is a high-school teacher. Perhaps this preponderance may detract from the value of the report. Nevertheless, the result of the committee's inquiries is given below, in the hope that it may be of interest, possibly of profit.

About one hundred and sixty lists of questions were sent to the capitals of the states, to the principal cities, to the smaller cities of Illinois, Indiana, Michigan, Wisconsin, and Iowa, and also to a few normal schools. About seventy answers were received. The order of the report is: the question, a summary of answers, a few of the significant answers given verbatim, and finally brief comment. In some cases one or more of these details is omitted. That the totals under the summaries are not uniform is due to the facts that there were no responses to some questions, and that there were more than one to others.

#### GRAMMAR SCHOOLS

1. *Are the reading lessons in your schools devoted entirely to literary study, or is some time devoted (a) to memorizing, and (b) to biographical study?*

There were 52 affirmative answers to (a), and 49 to (b). There were 8 affirmative answers to both. A very few were evasive or incomplete. It was apparent that there was more memorizing in the lower grades, and more biographical study in the upper grades.

*New Haven, Conn.* "Literary study, biographical study, memorizing, and informational reading, i. e., history, geography."

*Lansing, Mich.* "We correlate English history and reading to some extent; biography of American authors, statesmen, and publicists provide basis for composition."

*Syracuse, N. Y.* "Only two or three of the grammar grades of this city are really awake on the modern ideas of teaching English. Most of the work is a meaningless grammar grind under the useless methods of Reed and Kellogg."

The question did not get to the bottom of the matter. The following should have been added: Does the work interest the pupils? If it does

not, then the *Dial's* occasional charge that we teach pupils to hate literature rather than to love it, would seem to be well founded.

2. *Do pupils dramatize any masterpieces?*

There were 17 affirmative and 30 negative answers. Eighteen correspondents said "sometimes," and their answers should therefore be counted in the affirmative.

3. *Do your teachers seem to be as well prepared to teach English as other subjects?*

To this question there were 28 affirmative answers; 27 negative; 4 doubtful; 3, "majority are." Several answers were uncertain or incomplete.

*Buffalo, N. Y.* "I think not. It seems impossible to obtain a great body of teachers who are themselves readers or who have any large appreciation of literature."

*Richmond, Va.* "The idea seems to be quite prevalent that there is less need of special preparation. As it is the vernacular and everybody talks, it seems to be assumed that the child can readily learn it—hence less special preparation."

*Joliet, Ill.* "Yes. People know better how to find fault with the study of English."

*Toledo, O.* "My observation has been that teachers who teach English well teach other subjects well."

*Bloomington, Ind.* "The idea seems to prevail that almost anyone can teach the subject."

*Urbana, Ill.,* reports that the English work is the best they do.

*Maryland* (from the assistant state superintendent). "No. English of teachers and even of superintendents is often incredibly poor."

*Olney, Ill.* "Yes, better than some of the other subjects."

On the whole, opinions seem to be about evenly divided. The influence of colleges, normal schools, and of the public criticism of English teaching is undoubtedly working a change for the better.

4. *Have you any tangible evidence that your pupils read, out of school, as good literature as they read in school? Do they acquire a taste that requires indulgence?*

Affirmative answers, 21; negative, 23; doubtful, 16. As usual, there were a few answers that were difficult to classify.

*Louisville, Ky.* "Partial failure due to lack of books at home. Library board establishing branch libraries."

*Cleveland, O.* "Have good reason to believe that the outside reading is on a higher plane than ever before. Public libraries are our main outside witness."

*Indianapolis, Ind.* "Think outside reading on a lower plane. Nothing more than a natural tendency to ease."

*Urbana, Ill.* "No. School readers are purposely of a higher grade than current taste demands. But our pupils read a very creditable line."

*Ann Arbor, Mich.* "They read much—too much in many cases—outside of school; probably of not so good quality as that furnished at school but much better than it would be were it not for school influences."

*Boise, Id.* "Yes. Have pupils at end of vacation make out list of reading during vacation. Teachers suggest and select reading for pupils."

*Crawfordsville, Ind.* "Not quite so good literature as read in school, for the obvious reason that selections used in school are employed for the purpose of developing a higher taste than now possessed."

Opinions seem to be slightly in the negative. And it must be noted too that, since the schools heard from are doubtless above the average in merit, conditions are probably better in them than elsewhere. Nevertheless, the tendency is doubtless upward, owing to the increasing interest in school and public libraries. There is a manifest effort in many quarters to overcome the mental laziness that causes the reading of books that may be read without effort. If we had a little less of Buster Brown and his kind, conditions would be improved.

5. *In teaching composition, do you aim at accuracy of expression, or rather at the fulness and fluency that comes from much rather than from accurate writing?*

The answers were: accuracy, 10; fulness and fluency, 13; both, 16. Seventeen schools aim at fulness and fluency early in the course, and at accuracy later; 4 pursue the opposite course. One (San Francisco) aims at fulness and fluency in the first writing of a theme, and at accuracy in the second writing.

*Mattoon, Ill.* "We urge accuracy, but I do not feel that we hinder free expression by so doing."

*Detroit, Mich.* "Fulness and fluency receive the greater stress. For accuracy we depend upon what might be called the progressive elimination of error."

*Ann Arbor, Mich.* "Rather too much at accuracy, I fear; but we do not want to neglect that for overzealousness for fulness and fluency."

*Bloomington, Ind.* "About the only composition given here is oral expression." (From a high-school assistant.)

*Buffalo, N. Y.* "A decided change has taken place in the last few years. Formerly accuracy was the aim; now it is freedom of expression."

*Nashville, Tenn.* "In the grammar grades accuracy of form and expression is made a little more prominent; but of late my outline of composition for grades 4-8 has assigned subjects that encourage fluency because of greater interest." (From J. W. Sewell, one of the authors of the Baskerville and Sewell Grammar.)

There is an evident tendency toward the attainment of freedom of expression. The tendency would be a better one than it is, if the American people had any language consciousness and conscientiousness. When such



expressions as "an elegant time" and "a gorgeous time" are the only means some people have of expressing the superlative, time spent in securing a greater respect for adjectives, for example, is not wholly wasted.

6. *Do your reports from your high schools indicate that your pupils are able to use their knowledge of grammar in the study of other languages than English?*

There were 22 affirmative answers, 14 negative, and 24 admitted deficiency.

*De Kalb, Ill.* "Not on the basis of the high-school teachers who have been trained in Latin or German, and approach discussion from that standpoint. They expect too much."

*Cincinnati, O.* "No. Chiefly because the languages they study are inflected languages."

*La Grange, Ill.* "Yes. Our grammar work is our best work in English. Our high-school teachers commend it."

*Urbana, Ill.* "Not as they should. Grade pupils are not sufficiently drilled to make their knowledge definite and available."

*St. Louis, Mo.* "Yes, but they recognize the fact that English grammar is quite a different thing from the study of Latin."

*Trenton, N. J.* "Some of our best pupils can, but a large majority cannot use such knowledge."

*Detroit, Mich.* "Our teaching of English grammar is not for the purpose of furnishing a foundation for the Latin students."

*Lansing, Mich.* "Judging from the chance remarks of the Latin and German teachers, I should say that the training of pupils in English grammar was not of much assistance."

*Syracuse, N. Y.* "My observation is that knowledge of technical grammar is the least practical knowledge pupils have."

The great majority of the correspondents express more or less dissatisfaction with the existing conditions. The attempts to explain the reason seem to me, except in the case of one, to be wide of the mark. Two of these attempts, those of Detroit and St. Louis, are especially so; for it is not taken into consideration that teachers of Latin and German demand nothing from first-year high-school pupils except what they are supposed to have learned in the study of *English* grammar—knowledge of the parts of speech, subject and predicate, phrases and clauses. In these essentials, however, a great majority of pupils, if my observation has been accurate, are sadly deficient. Most of them have to learn these fundamentals again. Neither does the cause of the failure lie in the selection of a textbook, as some answers would lead us to think. To put the matter flippantly, it makes little difference what grammar is bought, so it is not used. The correspondent from Urbana, Ill., however, has precisely the right view of the matter—pupils are not sufficiently drilled. If, instead of dragging the

innocents through a textbook, the teachers should put some literary masterpiece into their hands—one that had been previously read for its literary value, say—and make the entire work the analysis of sentences in a simple way, there would be not only more knowledge of grammar in the abstract, but also better preparation for the study of other languages than English. Under the present method, grammar is all theory; under the other, it would be application, and the knowledge of it would cease to be the “least practical” the pupils have.

#### HIGH SCHOOLS

1. *Do you use the college entrance requirements in your high schools? If so, in what grades?*

Thirty-one schools reported that the college readings were used in 11 grades. All schools reported their use in some of the grades, the proportion seeming to increase as the pupils advance. In some schools there seemed to be no other process of selection, while in others many more than the required readings are used.

2. *Are you satisfied with these readings?*

Affirmative answers, 17; negative, 6; doubtful or indefinite, 23; exceptions mentioned, 4; with new requirements, 8; not unless supplemented, 3.

*Wheeling, Va.* “Abominable. What pupil cares for *Religio laici*?”

*Joliet, Ill.* “No, but we use others in the ninth and tenth grades. Old list narrow. New list more satisfactory.”

*Cleveland, O.* “Macaulay’s *Addison* and the *Sir Roger de Coverley* papers sometimes pall.”

*Indianapolis, Ind.* “If we are not satisfied with them, we do not read them.”

*Buffalo, N. Y.* “It is impossible to satisfy everybody.”

*Wheaton, Ill.* “Would like more American authors.”

*Ann Arbor, Mich.* “With those we use. Otherwise we substitute what we prefer.”

*Nashville, Tenn.*, adds southern authors.

*Jackson, Mich.* “Of course not. Who is? Better pleased with the new list.”

*Madison, Wis.* “There is nothing faultless under the sun. *De gustibus non disputandum.*”

The total impression is that slavish adherence to the required readings will work harm, and that the new list is much better because it offers a wider range of choice. It is plain that the new list has prevented an outright rebellion. However, I feel sure that it would be almost universally admitted that the college requirements have been productive of much good, and that the old list and the new would be regarded as steps to a perfect list, which must embrace all good books that come within the range of the pupil’s potential appreciation.

4. *Were any of your readings adopted at the request of pupils, or because of your knowledge of their desires?*

To this question there were 17 affirmative and 27 negative answers. Eight schools reported that selections were "sometimes" made at the request of pupils, and this number must therefore be added to the 17, which makes the affirmative and negative answers about equal. One school (Quincy, Mass.) has dropped readings because pupils did not like them.

*Cincinnati, O.* "Not so much their desires as their needs."

*Providence, R. I.* "Class asked to read *Kenilworth* after reading *Ivanhoe*."

*Cleveland, O.* "We have added to the books prescribed because we think the course should be a little more inspiring."

*Grand Rapids, Mich.* "We do not hold to requirements slavishly, and have a system of individual readings by which special needs of pupils are conserved."

*St. Paul, Minn.* "Certainly not."

*Nashville, Tenn.* "We know pretty well what they would like, and we undertake to raise their taste so that they will like what they had not cared for before."

*Detroit, Mich.* "Largely through the desires of pupils as shown in their regular class-work. The needs of pupils when cultivated grow into desires for those things which are best." (NOTE.—The course in the Detroit schools seems to be more flexible than those elsewhere.)

*Syracuse, N. Y.* "Under the 'New Syllabus' the teachers are free to choose the literature. Classes often clamor for certain texts, particularly Shakespeare."

*Atlanta, Ga.* "Because of our knowledge. They are not old enough nor wise enough to choose for themselves."

The summary and the quotations offer sufficient proof that a short list of readings, whether it is imposed by the colleges or not, is not popular, and that secondary schools are reaching out for more liberty.

5. *What masterpieces do you study intensively, and what extensively?*

It is practically impossible to give a summary of answers to this question because of their diversity, and because there is probably no general understanding as to the precise meaning of "intensive" and "extensive." Too many schools, however, read the entrance requirements intensively, and, apparently, with little other inspiration than the prospect of a college examination at some time in the future. Thus the practical interests of a minority are considered of more importance than the development of literary taste in the great body of pupils.

*New Haven, Conn.* "After reading a masterpiece intensively, we follow it with an extensive reading similar in style and theme."

*Cleveland, O.* "We make no particular difference. We do not know how to make any decided distinction."

*Mattoon, Ill.*, reads 17 authors, all intensively.

*Lansing, Mich.* "We really have three different degrees. Their supplementary reading is extensive, five or ten minutes being given to an individual report on a whole book, or else an entire class hour in case the entire class has been reading the same book. There is much greater thoroughness in taking up *The Last of the Mohicans*, *Ivanhoe*, etc. *Sir Launfal*, Shakespeare's plays, Macaulay's *Essays*, Milton's *Minor Poems*, and some of Arnold and Browning, are studied intensively."

*Freeport, Ill.* "I cannot say that we study any masterpiece intensively or extensively. I might say that each masterpiece is begun in this way (the intensive), and as soon as we feel that the pupils have the idea, we change to the extensive method."

The answer of New Haven seems to be especially rational, and that of Freeport is certainly good.

6. *Do the pupils of the upper grades of your high schools read fewer books of the Alger, Henty, Optic, and Holmes (Mrs. Mary J.) type than those of the lower grades?*

To this question there were 37 affirmative answers, and no negative; 11 were "think so"; 4, "don't know"; 2, "hope so." Three correspondents said they thought none of these books were read.

*Muncie, Ind.* "We believe so." (It is to be observed that the high school in this city has a very long and elaborate course of readings, including Lily's *Euphues*. One wonders what the reaction is when the pupils escape from the teachers.)

*Detroit, Mich.* "Guidance of reading thorough. Pupils attain taste."

*Grand Rapids, Mich.* "Yes. The Public Library has section with one open shelf for books recommended and required for given grades. At one place mediaeval romances and plays, at another American novels, etc. We control the reading of pupils by methods explained under 14, and by calling for reports every two or four weeks. A good part of the study of pupils is in the extensive reading. We also keep control of the notebook work on it, and make it the subject of occasional essays and tests." (Under 14: "We have recitations given of individual reading, in which pupils walk to the front and face the class, to tell a story, for example.")

My own observation in an extended experience is that the juvenile and the highly sentimental books are not read by third- and fourth-year pupils, especially by the latter. The boys discover for themselves that all the Alger books, for example, are alike; and they become weary of reading the same tale again and again. They discover, too, the constant exaggeration. So with the girls who have read many of Mrs. Holmes's books. At this period both sexes take to George Barr McCutcheon, Charles Major, and others of the red-light and slow-tremulous-music type, and soon repeat their former experience—that this style palls because of its sameness and its exaggeration.

tion. Many boys and girls now acquire a taste for the more rational romances; and some, especially girls, learn to like the realistic type of fiction. Many of them have read much of Jane Austen before they reach the fourth year, and Mr. Howells is a favorite.

Undoubtedly, much of this change is due merely to the advance of maturity; the course in English is to be given but a part of the credit, and teachers can make serious blunders by pushing pupils too rapidly into the heavier reading, as biography and essays, to both of which there is a strong antipathy in the minds of most young people. They can, however, be induced to read the heavier books if their interest is aroused beforehand, and if they have perfect liberty to return a book unread in case, after a fair trial, they find it uninteresting.

7. *Do you devote any time to the history of the English language?*

To this question there were 30 affirmative answers, and 11 negative; 8 correspondents said "some or little;" 1, "yes, in history department;" 13, "incidentally." The great majority, then, give some attention to this important matter.

8. *Do you study the history of English literature? American?*

The answers to the first question were almost unanimously in the affirmative, 55 having answered yes, 7 having said "indirectly" and "a little," and only 1 having said no. Twenty-six schools study the history of American literature, 3 do not, and 2 incidentally or a little. Many correspondents failed to answer this question.

*Bloomington, Ill.* "Yes, I think too much."

*Madison, Wis.* "Yes; authors are classified according to time, place, and thought. Not the graveyard type of history, however."

*Grand Rapids, Mich.* "Use Moody and Lovett as references, and read masterpieces chronologically."

The lurking fear that we are, or at least that we have been, making a mistake in teaching the history of literature, is plainly revealed in the first and the second of these quoted answers; and indeed the study can be made "deadly dull" and unprofitable, if the teacher regards its purpose the cultivation of memory rather than of judgment.

9. *Do you teach grammar? If so, with what purpose?*

There were 2 affirmative answers, 5 negative; and 7 replied, "incidentally." The other answers (which made two replies in one) were as follows: review in first year, 6; historical side, 1; sentence structure, 4; use in study of other languages, 5; technical knowledge, 5; analysis, 1; teaching correct English, 13; mental drill, 2; punctuation, 1; for its own sake, 1; preparation for teaching, 3; review at end of high-school course, 6. Two correspondents said that there was no formal grammar studied in their schools. One school has an elective review.

The highest number given here is 13, which registers the fact that many

teachers believe the study of grammar corrective of bad English, as it certainly is if it is intelligently taught. There is, I believe, much opinion to the contrary. At the same time, the training value of the study seems not to be lost sight of.

10. *In teaching composition, do you aim at accuracy of expression, or rather at the fulness and fluency that come from much rather than from accurate writing?*

The answers were: accuracy, 10; fulness and fluency, 10; both, 22; fulness and fluency and accuracy later, 12; accuracy first, and fulness and fluency later, 4.

*Mattoon, Ill.* "Accuracy above everything."

*Rockford, Ill.* "We aim at both, and get neither, except to a certain degree. We do not sacrifice quality to quantity."

Accuracy seems to be sought more in the high schools than in the grammar schools, and more in the upper grades of the high schools than in the lower. The condition is as it should be in this respect, but it must be admitted that the results as measured in the quality of written English in the schools, are far from satisfactory.

11. *Are most of your themes drawn from the personal experience of your pupils, or from their reading? Does the proportion change as the pupils progress? If so, which way?*

The answers were as follows: from personal experience, 8; from reading, 4; mostly personal experience, 5; mostly reading, 3; both, 26; evenly divided, 5; variable, 1; no intelligent plan, 1. Thirty-one schools have more themes from the reading of pupils as the classes advance, and fewer from personal experience; while only 4 pursue the contrary plan.

*St. Louis, Mo.* "Toward a larger use of subjects made possible by their increased information and strengthened insight."

*Madison, Wis.* "From both sources. The change is toward personal experience. Those from their reading are time exercises written in class—impromptu."

*Maryland* (from the assistant state superintendent). "Few teachers follow any intelligent plan. Most work is too formal, and there is entirely too little composition work."

The total impression is that in the earlier years more themes are taken from personal experience than from reading. This is as it should be, unless we are training pupils to be critics.

12. *Is composition correlated with other subjects?*

There were 33 affirmative answers, 3 negative, and 12 indefinite. Three correspondents answered "somewhat;" 2 that composition is correlated with "other English work."

*Providence, R. I.* "Only so far as other subjects provide theme-titles, and as tests in other subjects take the place of the usual compositions."

*Joliet, Ill.* "Not to such an extent as to destroy interest in composition."

*Grand Rapids, Mich.* "To a small extent, but we arrange for Homer at the same time that Greek history is studied, for Julius Caesar at the time Roman history is studied, and for mediaeval romance in the same way."

*Wausaw, Wis.* "Teach composition in whatever pupils write—all subjects."

In a large majority of the schools heard from, then, composition is correlated with other subjects; and as pupils are likely to get the idea that accuracy of expression is needful only in the English work, the condition seems to be good. It is necessary, however, to heed the warning implied in the answer of the Joliet correspondent.

13. *Do you find your first-year pupils deficient in any respect? If so, what? Have you traced the difficulty to its causes?*

There were but 3 negative answers to this question, and 10 to the effect that the pupils are as well prepared as can be expected. The others were as follows: indifference, 1; carelessness, 2 (no cause known); inability to get ideas from the printed page, 7; spelling, 7; spontaneity of expression, 3; English grammar, 13; power of concentration, 4; vocabulary, 6; illogical thinking, 1 (cause—haphazard reading); inability to use former acquisitions, 1; clearness of expression, 1; dictionary work, 1; fulness of expression, 2; penmanship, 1; written work, 3; reading, 1; punctuation, 1; interest, 1; letter forms, 1; imagination, 1; creative power, 1; sense of humor, 1; elementary ideas, 1. Besides these, there were a few answers of a general character, as "many respects," "usual difficulties," "not as a whole." The various causes were: foreign parentage, 3; lack of time for English in the grades, 1; immaturity, 5; lack of suitable text in grammar, 1; lack of practice (in writing), 1; home surroundings, 1; lack of uniform methods in the grammar schools, 1.

*Richmond, Va.* "The most serious difficulty is the inability to gather thought from the printed page."

*Atlanta, Ga.* "Too many things done for them, and too many subjects attempted by them. Too much effort to secure individual results. The rudiments are essential to all children. Attempts to find the 'particular taste' of a very young child is a waste of time."

*St. Louis, Mo.* "They have the natural defects of the stage of advancement."

*Olney, Ill.* "Yes. Many of them have not been trained to be responsible for anything."

*Nashville, Tenn.* "Deficient in accurate analysis of the sentence; in fulness of expression in the recitation; in ability to study without the frequent assistance of the teacher; in ability to use the dictionary skilfully, etc."

*Philadelphia, Pa.* (after admitting deficiency). "This will always be the case, as all pupils cannot be equally proficient in all branches."

*Bloomington, Ill.* "We have the same complaint to make of the pupils coming to us that the teacher of the grades has when a new grade is promoted to her room. We forget that there is a year's difference in the preparation of the pupils just received when compared with the pupils promoted to second year."

*Buffalo, N. Y.* (after admitting deficiency). "This is due to immaturity of mind, and cannot be wholly overcome."

*Cleveland, O.* "Pupils of the first year do not usually have very much idea of unity. They find it easy to wander constantly from the main point."

*Rockford, Ill.* "No. The pupils are all right."

*New Haven, Conn.* "Our first-year pupils have the faults peculiar to their age. Time alone will give them drill and experience needed."

*Cincinnati, O.* "Not any more than might be expected from children. We teachers forget that they are children of but thirteen or fourteen years of age, with immature minds and narrow horizons."

*Cairo, Ill.* "General inability to concentrate energies upon a thing long enough to master it. Too many are irresponsible—can't or won't do a thing for themselves. Will follow a plan, but can't originate even the simplest. Any written work to be handed in is usually well done, but otherwise preparation of work is neglected."

*Bay City, Mich.* "Lacking in knowledge of simple, practical English grammar—parts of speech, kinds of clauses, subject and object, etc. Partly due to hearing incorrect English at home, doubtless. One teacher says it is because too much grammar work is attempted in the grades, and too early."

The greatest deficiency seems to be in grammar, and the next in spelling and in ability to get the thought from the printed page. My own observation leads me to the same conclusion, and I have no doubt that the condition is general.

As to the causes: Comment has already been made on deficiencies in grammar. Professor Brander Matthews and President Roosevelt could doubtless throw light into dark places so far as spelling is concerned. The third cause, however, is a more difficult matter. A reading of the quoted answers will reveal a disposition to regard most deficiencies as the result of immaturity and unequal ability in the pupils; and, if so, to what correctives can we have recourse? There is much, however, in the complaint that too much is done for pupils in the grammar schools. On reaching high school and being given the task of learning a lesson from a book, they are often helpless. A change of method in the grades might produce a perceptible difference in a short time.

14. *Do you have exercises in oral expression? If so, what?*

Seven correspondents answered yes, and 3 no. The other answers were as follows: reading, 9; oratory, 4; elocution, 3; oral composition, 18; narra-



tion of things read, 11; accurate answers in recitation, 12; declamations, 5; telling stories, 6; debates, 12; literary societies, 2; in translations, 1; general discussions, 2; reports, 2; follow Scott and Denny, 1.

*Detroit, Mich.* "Oral expression covers a varied field."

*Madison, Wis.* "A teacher of elocution, and assignments to pupils to make close study of some selection and to present it orally in class in all its various phases; its author, theme, informing idea, style, diction, etc., with perhaps a few brief quotations."

*Joliet, Ill.* "Four years course in public speaking."

*Louisville, Ky.* "Elocution. Scenes from Goldsmith and Shakespeare. Work valuable."

15. *Is English taught by specially prepared teachers?*

There were 48 affirmative answers, 5 negative, and 11 replied, "generally" or "sometimes."

*Ottumwa, Iowa.* "Have three teachers out of twelve who teach only English."

The condition is satisfactory, and the credit plainly belongs to the colleges and the normal schools.

#### GENERAL

1. *Have you a club or a society that makes a study of English work?*

There were 6 affirmative and 49 negative answers. Doubtless there are many conferences of English teachers that might be called clubs. There seems to be none, however, whose purpose and whose latitude in the selection of members are precisely the same as those of the Chicago English Club. This organization has not yet proved its usefulness, but it will consider that it has done something worth while when another body of people interested in English work follows its lead.

2. *Have you any arrangement with your public libraries by which your pupils may be supplied with books at your request?*

To this question there were 56 affirmative and 6 negative answers.

*Buffalo, N. Y.* "Probably the most effective in the country. Each room is supplied with a traveling library, which is changed twice a year."

*Grand Rapids, Mich.* "... a scheme to lend 200 books in a case. Probably will not be successful, since teacher is responsible for books."

*Ann Arbor, Mich.* "City library is in the high-school building."

*Jackson, Mich.* "The library purchases books suggested by the faculty (almost any number of copies of the same book), and sends them to the school for the pupils to use. The high school is like a branch library."

*Nashville, Tenn.* "The Carnegie Library of Nashville supplies books to all grammar-school grades. . . . They are sent out twice each half-year, circulating from school to school, according to a regular schedule. These are read as supplementary readers, alternating with the regular readers."

*Albany, N. Y.* (From the city superintendent.) "Yes, I am fortunately chairman of the library committee of two public libraries."

*Lansing, Mich.* "Many copies of the same book in public library. In case of need in class, pupils are sent to get books. Have also grade libraries which travel from school to school."

*Madison, Wis.* "Teachers may request that certain books be reserved and placed on certain shelves for special use of pupils."

*La Porte, Ind.* "City library operated by school board."

*Detroit, Mich.* "Teachers' library in school. Many supplementary reading-books. Distribution from public library."

*Philadelphia, Pa.* "Students use the various libraries under the free library system, and special attention is given to young people's books at all branch libraries. Older pupils read real literature, as do adults. There are reading-rooms in all the libraries for them."

*3. Has each of your schools a library? How are the books supplied?*

Six correspondents replied simply in the affirmative; 2, in the negative; 4, that the libraries were small and unsatisfactory; 2, that there was a library in the high school only. In 26 cities the books are supplied by the board of education, in 6 by entertainments, in 7 by special funds, in 2 by pupils, in 1 by donation and purchase. In 2 cities there are only reference books in the schools.

Bay City, Mich., has 1,300 books in the high-school library; Jackson, Mich., 3,400; Atlanta, Ga. (Girls' High School), almost 7,000; Joliet, Ill., 2,200 (with an annual appropriation of \$300); Rockford, Ill., 2,394 (and much smaller libraries in each of 19 grade schools); Aurora, Ill., 2,000 (and each grammar school 1,200; annual appropriation, \$600); St. Paul, Minn., has fund known as the "State Award Fund," which yields to each high school \$1,500 annually.

Truly America is the country of opportunity.

If it were possible, from the data in the foregoing report, to say which one of the states is most thoroughly alive on the question of English teaching, I should say without hesitation that it is Michigan.

## THE STANDARDIZATION OF THE NEW ENGLAND HIGH SCHOOLS

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Undoubtedly the great defect of the schools of New England is lack of uniformity. One town will have a magnificent equipment, expert supervision, and well-paid and professionally trained teachers; while a neighboring town only a few miles away may have poorly ventilated buildings, little or no supervision, underpaid teachers, no *esprit de corps*, with consequent poor instruction in the schools. Again, we too often find the following conditions: A high school under one principal may be doing excellent work, easily preparing its graduates for college. Under his successor the work of the school may fall far below standard, but as long as the discipline is fairly good, and the teacher is popular with his pupils and in the community, the matter of scholarship is of little or no consequence. The same holds good too often of teachers in the elementary schools and assistants in the high schools. We admit that the intellectual is not the only criterion by which to judge the efficiency of a teacher, but it is nevertheless the *sine qua non* of good teaching.

In order to correct these defects we must have something more stable than local sentiment to build upon. As long as each community fixes its own standards, so long there is bound to be the greatest diversity in our schools. It is very evident, to the casual observer even, that something should be done to better high-school conditions in New England. Can we look to the higher institutions of learning for help? Does the present school system contain potentially the means of correcting its own defects? If neither of these affords a solution of the difficulty, we must look elsewhere for the suggestions of a solution.

In the February issue of the *School Review* I discussed the standing of the New England high schools, using the standard

of the College Entrance Certificate Board as a basis of judgment. The results of that inquiry were not in the least flattering to the high schools, taken as a whole, although those sending on certificate are doing commendably well. Briefly summarized, we showed that a considerable proportion of high schools failed to attain the necessary standard, although by reason of equipment and teaching force they should be doing a satisfactory grade of work, sufficiently so to meet the demands of the college. We also called attention especially to the smaller high school, both weak and strong, which under present conditions must of necessity fail to do a good quality of work.

How large the number of non-standard high schools is may be gathered from the following table:

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.
No. high schools .....	147	57	64	245	20	77
No. approved .....	25	17	9	112	11	15
No. not approved .....	122	40	55	133	9	62
No. with fewer than 30 pupils .....	61	18	21	42	1	16
Not approved with more than 30 pupils.	61	22	34	91	8	46

So far as our present purpose is concerned these may be classified as follows:

1. Schools with a very small attendance, possibly only ten or fifteen. Generally speaking, these schools should be allowed to continue only when the pupils cannot be transported to neighboring schools, or when several communities cannot unite to form a larger school. If they must continue, let them be greatly improved.

2. Schools with from thirty to one hundred pupils, but often with a two- or three-year course of study, a totally inadequate teaching force, little if anything of library or of scientific apparatus, and sometimes in cramped and poorly appointed rooms. With this class of schools the present paper is largely concerned.

3. Schools adequately equipped, but which, either from poor supervision or from low standards, are doing indifferent work and showing poor results. These need toning up. Under proper management they could soon attain a high degree of efficiency.

But is our standard too high? Are we justified in taking as our criterion the ability to prepare for college?

For my part I do not think that this standard is at all too high, nor do I believe that the colleges require too much either in quantity or in quality. At least, my experience has led me to this conclusion. Four years of study, with eighteen or twenty recitations a week, is sufficient in quantity, while the quality is certainly the minimum which the average boy or girl should attain. If the better pupils in a class are unable to do advanced work, what, pray, must be the intellectual accomplishments of the poorest member of that class? Measure him by any fair standard. Is his knowledge clear-cut and definite? Can he reason with any degree of accuracy? Can he read, understand, and express himself? Is he equipped for hard, honest work? If he has spent four years of time in the secondary school without acquiring such habits of mind, somebody has been fearfully negligent. We must also remember that the colleges generally are very liberal in offering a wide range of electives for admission—so wide, in fact, that any respectable high-school programme could easily provide therefor.

Taking it for granted, then, that an effort should be made to standardize the high schools, how are we to secure this end? Is there any possibility that the New England colleges, to promote their own interests, will seriously undertake this work? Does the school system of New England contain within itself the possibility of decided and uniform improvement? Let us state, first of all, the attitude of the colleges; then briefly review the possibilities of the present school system's bettering itself.

The attitude of the colleges is well represented by the College Certificate Board. With the advent of this board we cherished the hope that a solution of the vexed problem of articulation between school and college was at hand, that tangible results in the shape of better inspection would follow. But unfortunately the board chose to place rigid limits to its sphere of usefulness by confining itself entirely to the effort to see that no unprepared student gets into college. The school that vouches for such a graduate is deprived of the certificate right, no matter

if the college is equally to blame for the failure. Further, the board does not make any pretense of inspecting the schools by visiting them and seeing what is actually being done. By so doing, by suggestion and helpful criticism, the board might become a powerful factor—yes, the most powerful factor—in education in New England. But no; the secondary school is left to itself to correct its own faults as best it may; to grope in darkness until it gains the light, if haply it does attain thereto. Whether it finally chances upon the right path, or continues upon the road which leads to non-certification, are matters which do not concern the board; for its province is not to minister unto, not to lend a friendly hand or a helpful suggestion, but only to close the doors and bolt them tight against backward and erring schools.

The Certificate Board in so doing is entirely consistent with New England traditions. The colleges are in no sense maintained by public taxation, and in turn have no responsibility in the matter of inspecting the high schools. And while we grant that the colleges indirectly influence the secondary schools, that college professors are willing to address conventions of secondary teachers, and that the Association of Schools and Colleges is doing good service within its sphere, yet no one of these agencies, nor all of them combined, by reason of imposed limitations, can do the work required. They are all very well in their way, but they do not go far enough; they do not attempt any constructive system of inspection.

We must, however, acknowledge that the same unfortunate situation obtains everywhere in New England; there is no system of education; each town or city has its system, but there is lacking that impetus and solidarity which come from organization and centralized authority. No one of the six New England states has what can in any true sense be called a centralized school system reaching through the high school even. The colleges are separate institutions, in no wise connected officially or unofficially with the secondary schools.

In order to emphasize this most patent and yet most unfortunate feature of New England's schools, I quote from the

report of Miss Mary M. Abbot, of the Collegiate Alumnae of Connecticut. This organization made a careful study of school conditions in its own state, and has given an exhaustive and admirable report. Miss Abbott says:

The most appalling fact seems to be that we do not offer equal advantages to all the children of school age within our borders. The greatest discrepancy exists between our best schools and our poorest. The cause for this unfair treatment of our children seems clearly to lie in our system of management. Instead of having our schools under one system of management, and thereby bringing about a certain degree of uniformity in the advantages they offer, we have about one thousand separate and distinct systems, each absolutely independent of every other and perfectly secure in conducting poor schools, if its own community demands no better.

What is true of Connecticut is also true of the other New England states. There is no uniformity, and each community sets its own standard of attainment.

The secretary of the Collegiate Alumnae, Mrs. Lucretia A. Cummings, in criticizing the district system says:

Here is the greatest dearth of superintendence. Here is the stronghold of favoritism in making appointments. Here has been found the school-board member who became acting visitor, then secured himself as teacher, then paid his own salary and supervised his own work. Under this head is the town where forty-two school officials are elected to care for seventy-five school children—ample provision for "individual attention."

Order in Valuation of Property	City	Taxable Property Appraised for Public Schools in Mills and 100ths by Town Tax	Rank in Amount Received from State	Order in Valuation of Property	Town	Taxable Property Appraised for Public Schools in Mills and 100ths by Town Tax	No. of Pupils in High School	Rank in Amount Received from State
1	New Haven....	3.68	1	43	New Milford...	4.23	60	37
2	Bridgeport....	3.53	2	61	Stratford.....	6.91	37	40
3	Hartford.....	2.51	3	81	Saybrook.....	5.08	46	91
4	Stamford.....	4.97	8	65	Bethel.....	8.83	83	51
5	Meriden.....	5.56	6	48	Farmington....	4.18	71	56
9	New Britain...	7.25	5	37	East Hartford..	6.44	65	27
10	New London...	5.01	11	64	Watertown....	5.11	37	58
11	Manchester....	3.15	17	84	Woodbury.....	4.98	34	83
13	Ansonia.....	5.08	12	53	Windsor.....	4.84	59	49
14	Middletown....	2.32	13	58	Portland.....	5.90	43	50
				61	Stafford.....	13.10	60	39

It now remains to be seen whether the smaller towns are already bearing their share of the expense of public education. In order to answer this question we must get at the facts of the case. In the preceding table all the cities and towns named have public high schools.

In examining the above table we must bear in mind that it is much easier for the wealthy cities to give out of their abundance than for relatively poor towns to contribute from their meager resources. It requires greater self-denial for a man worth one thousand dollars to part with one hundred of it, than for his neighbor worth ten thousand dollars to pay out one-tenth of his wealth.

This table is fairly representative of the expense of education in communities of different sizes. In the larger cities the absolute cost per pupil is much greater, but the relative cost considerably less. The table clearly shows three things: First, the small towns which support high schools are already doing all that can be asked of them. They are contributing a higher percentage of their taxable property than the large and wealthy cities. Second, the money distributed by the state for educational purposes does not go to the towns which most need it. For instance, Hartford, reputed to be the wealthiest city of its size in the United States, receives as much per pupil as the poorest town within the borders of Connecticut. This is absurd. Third, it is manifestly unfair to ask the small towns to increase their tax-rate, or to favor high-school education to the detriment of the elementary school.

The only conclusion to be drawn from the foregoing discussion warrants us in maintaining that the small non-standard high schools can be bettered only from without. In other words, the state, which has assumed the task of education, must give greater help to these schools, and at the same time undertake the work of a thoroughgoing and constructive system of inspection.

First of all, the state must make it possible for the high school to do good work. To secure this would require a four-year course of study, a teaching force sufficiently large to handle such a course, and sufficient apparatus for physics and chemistry.



There is need also of better school libraries. Contrast these possible conditions with what we find in many places: very often only a two- or three-year course of study, one or two teachers for thirty or fifty pupils. Sometimes we find three teachers trying to handle a four-year course of study in a school of eighty-five pupils. Teachers hear from thirty to forty-five recitations a week in widely different subjects. Often the sciences cannot be taught for lack of apparatus, or else are taught only from textbook.

Is it right to work under such disadvantages? Every educator will answer that it is vicious for the pupil's best development, to say nothing of the drudgery imposed upon the teacher. Is it necessary? With the vast amount of material wealth in the New England states, no one can plead poverty. Wisconsin appropriates annually \$100,000 for her "free high schools." Surely every state in New England can do as well, if need be.

In order to be more precise, let us get at the facts as closely as possible. We saw by the table of approved schools that Maine had sixty-one non-approved schools with more than thirty pupils; New Hampshire, twenty-two; Vermont, thirty-four; Massachusetts, ninety-one; Rhode Island, eight; and Connecticut, forty-six. From a cursory examination I am persuaded that about two-thirds of these schools need further state aid. Suppose the states should each place an extra teacher in everyone of these schools, at an expense of \$500 and besides give the school \$100 a year for apparatus. Suppose the standard teaching force in high schools were put on the following basis: schools with from thirty to fifty pupils, three teachers; schools with from fifty to seventy-five pupils, four teachers; schools with from seventy-five to one hundred pupils, five teachers. If such a policy should be adopted by each state, high-school education would receive a tremendous impetus, and all these schools would soon be doing an excellent quality of work. For the small school, provided it has an adequate teaching force, can do for the individual pupil what the city high school, with its larger attendance, cannot possibly undertake to do.

But what would be the cost to the several states of securing

a standard system of high schools? On the basis of the state's giving \$600 annually to two-thirds of the non-approved high schools with an attendance of thirty or more pupils, it would cost Maine \$24,000; New Hampshire, \$8,400; Vermont, \$13,200; Massachusetts, \$24,000; Rhode Island, \$2,400; and Connecticut, \$30,000. With no one of these states can any reasonable person raise a doubt on the question of money. The general policy of state legislatures toward education has always been a liberal one. If the question is fairly and intelligently presented, I am sure no legislature in New England would hesitate on the matter of expense.

It now becomes necessary to define more clearly what we mean by the term "inspection." We use the word in its fullest acceptation, but in no wise would we wish to come in conflict with the local principal or superintendent of schools; there is absolutely no need of any clash. By inspection of high schools we mean: (1) A competent educator, in an official capacity, should visit the school. He should scrutinize such details as the course of study, daily programme, library and laboratory facilities. (2) He should visit the classrooms, observe the methods of instruction as well as the discipline. When advisable, he should make helpful suggestions, criticizing tactfully and constructively, always stimulating a teacher to do his best work, and pointing the way to something better. (3) He should use his influence with the school board, whenever necessary, to secure better conditions for work. (4) He should aid in interpreting the course of study, suiting it as nearly as possible to the three potent factors which determine the curriculum of a school—the community, the elementary school, and the college. I believe that an inspector of high schools can do an invaluable service to the cause of education by articulating the high school with the grammar school and the college, so that educational development will be continuous from the kindergarten through the university.

The above contains little that is new. But it does attempt, by including what is in successful operation elsewhere, to do two things: first, to make high-school education a worthy end in itself, to insure to the pupil who does not choose to continue

his education in the higher institutions of learning a scholastic training which shall be rigid, thorough, and comprehensive; second, to make it possible, so far as teaching force, curriculum, and equipment go, for every high school with an attendance of thirty or more, to do good work; then, by a system of constructive inspection, not merely to see that good results follow, but rather to help where help is needed, to strengthen the weak, to counsel and to advise. For the logical corollary of special state aid is state inspection. State inspection would also tend to do away with the vicious elements of sentiment and local autonomy as they exist in our present system of schools.

Other advantages would follow the standardizing and inspection of our high schools. Chief among these we may mention the influence upon the elementary schools. Any effort to better the high schools has a decided bearing upon the grammar schools, leading to better-prepared teachers, a higher quality of instruction, and on the part of the pupil a greater incentive to study. The normal schools also could do strictly normal-school work. Under present conditions many of our normal schools are obliged to devote a considerable part of their time to academic studies at the expense of legitimate normal-school instruction.

## SOME CAUSES THAT ARE LEADING TO THE DISAPPEARANCE OF GREEK FROM SECONDARY SCHOOLS

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AGNES E. STUART

Hyde Park High School, Chicago

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The value of the study of Greek has often been questioned, but probably never more so than at the present time. That the subject has suffered a marked decrease in numbers in the past fifteen years is not to be denied, while in actual enrolment of pupils the loss appears small. Still, in view of the increase of students in secondary schools, the decline is rather discouraging to the enthusiastic Greek teacher. Where, in 1891, 25,000 pupils in secondary schools were studying Greek, the reports for 1904 show 18,500 enrolled in Greek classes.

The condition in some of the states, so far as it has been possible to ascertain from statistics at hand, is as follows:

According to the Regents' Reports of the New York state public schools, the number taking Greek in 1895 was 1,470; in 1905 there were 1,250. This seems not a great decrease; but in 1900 there were 2,260 enrolled in Greek classes. Then came an action on the part of most of the colleges granting the A.B. degree without Greek, and immediately there occurred a falling-off in the number taking this subject. The University of Syracuse, however, refused to make any change in its requirements for the arts degree, and seems to have justified itself, for there are now in Syracuse University more literary and classical students than in either Cornell or Columbia. The Syracuse High School too reports that they have had no loss in their Greek enrolment in the past five years.

In Michigan, within three years after the passing of this same regulation by the State University, only 50 per cent. as many students as before presented Greek for college entrance.

In Illinois there are few public schools where Greek is still

taught. There are no regular classes in the public schools of Chicago. A few pupils are being taught outside of the prescribed work by a few of the teachers. Oak Park has two small classes, and Streator has a class this year for the first time. Evanston still continues its work in Greek, and I am told that there are classes at Peoria and Ottawa. Other than these, except for the little town of Sparta, loyal to its Greek name, I know of no public schools in the state where Greek is taught.

In Minnesota the state high-school inspector fought Greek out of the schools, so that now the subject is taught in only four of the public high schools.

In Massachusetts the same sort of opposition was made by many of the superintendents; but, in spite of it, Smith College has never had so large a freshman class in Greek as that of this year.

In Cleveland, Greek is still taught in three of the city high schools. In the East School—a comparatively new school—the beginning class of this year is the largest in its history, but the classes in the other two schools show a decrease. In Springfield, O., there are still some classes, but the course of study has been changed so that hereafter only two years of Greek will be offered in the high school.

These are reports from public schools only, where the decrease would naturally be greatest. Many private schools still have large classes in Greek; though the same reasons that cause a decadence in the public schools would affect in a measure the private ones. Dr. McPherson, of Lawrenceville, reports that, while ten years ago 143 boys were studying Greek, there are this year but 66. In giving the reason for this, Dr. McPherson says:

Of course, there is the alleged difficulty of Greek, the growing popularity of scientific courses, and the changes in college requirements. In our school the last reason is probably most decisive.

Dr. Leacock, of Phillips Exeter Academy, makes the following statement:

This year 100 students out of 400 are taking Greek—a proportion of 1 to 3. Ten years ago the proportion was 1 to 2.

In commenting on the change he says:

In general boys take French and German in preference to Greek, because they believe these to be easier. Most boys live in the present. Fathers who had Greek generally see that their boys take it. Fathers who did not take Greek generally see that their sons take modern language for practical reasons.

Herbert Spencer has said: "Parents dress their children's minds, as they do their bodies, in the prevailing fashion." Unfortunate it is that the prevailing style is not Greek. Then, too, the spirit of the time is practical and utilitarian. And so it comes that a crowd of sciences has caught the imagination of the public, and strenuously insisted that wisdom is born with them. Of course, it depends largely on what one means by "practical." It must be admitted that a course composed largely of culture subjects will not enable a student, immediately upon graduation, to command so lucrative a position as if he had given his time only to applied science. But surely a curriculum which has in the past produced men who have risen to the highest places in all fields is truly practical and those educators who would change it, have still to demonstrate that the substitutes will round out a course in the same high sense.

Senator Hoar, in an article which he wrote on the value of classical study, once said:

Of one thing I feel confident, that is, that the men I have known in public life, in the pulpit, and at the bar, have been men who have been good Latin and Greek scholars who have kept up their love and study of these through life; especially have those who have been lovers of Greek shown great superiority in effective public speaking.

Charles Francis Adams, who in a Phi Beta Kappa address at Harvard about twenty years ago did more perhaps than any other man to discredit Greek, took it all back in his address at Columbia last spring, and said:

I would away with arm's length lecture-room education, I would somehow get back to contact of mind with mind. I would make Latin or Greek a compulsory study till the day of graduation—the one royal road to all that is finest in letters and art.

At a symposium held at Ann Arbor last March on "The Value of the Study of the Classics as a Preparation for Medicine

and Engineering," Dr. Vaughn, dean of the Department of Surgery, said:

There has never been found a better training for the thinking apparatus of the young than Latin and Greek. Carelessness and superficiality are incompatible with thorough study of these subjects. Observation is sharpened and perception becomes more delicate, so a habit of attention to detail is formed, which will be of inestimable value should medicine be chosen as a profession. And so it seems to me regrettable that two years of good solid work in Greek are not demanded as an unconditional requirement for admission to medical schools.

Professor Sadler, of the Department of Engineering said:

Engineering demands definiteness and conciseness of thought, and one of the chief difficulties on the part of engineers is to overcome a tendency to generalization on the part of students. While it may be the opinion of many that some elementary form of science may accomplish this result, I venture to suggest that studies of this nature, as a general rule, have a result diametrically opposite, and lead to vagueness rather than concreteness, and that as a means of cultivating ideas of exactness, the humanities are *facile princeps*.

Next as a cause for the decline in the study of Greek is the place Commercial subjects have been given in the high schools. These are for the most part elected by pupils who desire to add to their credits by what is known as a "snap" course. There is no progressive development in such study as this, and for these students education is merely an aimless *Odyssey* from classroom to classroom, with the mistaken impression that anything is education which fills up the time.

That Greek is no longer required for the A.B. degree in college is one of the strong reasons causing its decline in the public schools. Then, too, especially in smaller schools, Greek and Latin are usually taught by the same instructor; and as the demand for Latin is greater than the demand for Greek, the Greeks are forced to yield.

Further, the difficulties of the subject deter some from its study. We are told that modern languages would be a far better investment of time; for the proficiency gained in Greek is not commensurate with the energy expended. I believe that the student should meet some subjects that are difficult and master

them; that he should not be allowed to elect on the lines of least resistance; for the ordinary pupil will choose an easy subject, if he can; and few there are who realize that the fact that a subject is difficult for them is an indication that it may prove a good training.

But, in addition to these general causes, there have been some special reasons which have been operative in driving Greek from the Chicago schools. About five years ago a regulation was made that no class should be started in any subject with fewer than twenty members, and, should the number fall below fifteen the class must be discontinued. This applied not merely to the first year of a subject, but to all the years. Even with a beginning class of thirty-five, it might happen that, for various reasons, the membership of a class in Greek might fall below twenty at the beginning of the second year. This was disheartening for the boy or girl who needed the work for college preparation. So, with the uncertainty of being able to finish, many a pupil has been forced to substitute something else for the Greek he really wished. In addition to this, there was for a time a rule in force that one year's work in a language should receive no credit. So, if one year's work had been done, and the class forced to disband, the pupil lost not only his chance for college preparation in the subject, but was given no credit for his one year of hard study. This rule was so manifestly unfair that it was soon rescinded. However, Greek has not yet had time to recover and begin a new lease of life in the public schools of Chicago.

I am not one of those who believe that all our boys and girls should study Greek. But it is to be regretted that those who would gladly take it are shut out from the opportunity of doing so. Of course, there are private schools, but these are expensive, and often those who desire most to take Greek cannot afford to pay for it.

The course of study as at present arranged seems to give a smattering of many subjects, but only a fraction of the substantial foundation of fifteen years ago, and seems to count of more value a ready smartness than sound scholarship and good preparation to meet the experiences of life. But there are some hopeful



signs. There is a growing feeling that the pendulum is already swinging back. Dr. Leacock, already quoted, says: "I am not alarmed about the future of Greek. If I read the signs of the times correctly, the opinion is slowly forming that French and German as substitutes for Greek have not vindicated themselves; useful as they are, they cannot do the work that Greek has done so well." Professor Moss, of the University of Illinois, says: "I think there are visible signs of a change from the deluge we have been suffering for the past ten years. But we cannot expect to recover in a day from all the mischief that has been done." Mr. Merrill, one of the trustees of Phillips Exeter, says: "In my opinion, there will be a change of attitude on this subject, so strong that it will be a surprise to many of the educators of this country."

We hope that they are true prophets, and that the beginning of this era is near. When men shall feel that life consists, not merely in the abundance of goods possessed, but also in the ability to understand and appreciate the greatest products of art, architecture, and literature, then Greek will again take its place in the curricula of our high schools and colleges.

## THE NEW MOVEMENT AMONG PHYSICS TEACHERS

### CIRCULAR V

In response to the suggestions and questions in Circulars III and IV, 164 answers have been received. These have come from 105 secondary schools, 7 normal schools, and 52 colleges. Of these 164 answers, 43 merely expressed general approval of the work, and 24 more asked to have the remainder of the syllabus sent to them when it was ready. There were 42 who answered all of the four questions at the end of Circular IV. Of the remaining 55 letters each discussed one or more of the various points suggested.

I. Taking up first the theses in Circular III, 14 approved of them *in toto*, just as they stand; and 18 others approved of them in general, but each made a few specific suggestions as to desirable changes. In the light of the suggestions that have been received, the theses have been reworded, an eleventh added, and they are now again submitted to the teachers for criticism and suggestion in the following form:

1. The subject-matter of the present elementary course in physics must be reduced to two-thirds of its present amount, unless the time allowed for covering it be increased to one and one-half years.

2. If the subject-matter is reduced, those topics that have the least bearing on the student's life and on the problems likely to occur to him spontaneously from his own experiences should be eliminated first. The better-established portions of the subject should have precedence over the more recent unproved speculations, on the ground that, in the limited time, it is better to teach those things that will probably be still believed when the youngster is grown up.

3. In the elementary course the method of presentation is far more important than the amount of subject-matter learned. This method should be so framed that the emphasis is laid on the development of habits of scientific thought, rather than on the mastery of subject-matter. Hence it is better to present a few topics in such a manner that they are powerful examples of the method by which science obtains its results, than to try to teach a large number of more or less scattered facts and theories in such a way that they can only be committed to memory.

4. In applying practically the principle of thesis 3, it is important that definitions be justified before they are introduced. In order to do this, the concepts with which a definition deals should be built up in the student's mind by a discussion of familiar experiences, and he should be led to see that there exists among the concepts a relation that admits of definition, before the definition is stated. A definition that has been so introduced will be appreciated as a convenience and every one that is not so appreciated had better be omitted from the required work.

5. In like manner, it is generally not advisable to state a law until the concepts and relations with which it deals have been implanted in the student's mind by a discussion of common experiences and of simple qualitative demonstrational experiments. In other words, the student will generally not appreciate the law unless he be given an intuitive and qualitative perception of the relations summarized by the law before the law is stated; i. e., the law should be to him a hypothesis before it becomes a law.

6. The student should be made to see clearly that the laboratory experiments furnish the means of converting hypotheses into laws. He should also be made to see that the apparatus is not the law, that it is not necessary to remember the details of the apparatus in order to appreciate the law, and that the exemplifications of the law are not confined to the apparatus.

7. The student should be made to comprehend that every law is a tested hypothesis, and that the tests are always subject to some error, so that the statement of the law is always a statement of what we believe to be true in an ideal case. He should understand that the measurements by which a law is said to be established give results which approach more and more nearly to the law, the more carefully the measurements are made, and the more completely the disturbing effects are eliminated. He should also be shown that in every practical case the law is not verified unless allowance is made for friction, air resistance, etc.

8. In the laboratory work it is often more profitable to place the emphasis on the determination of efficiency rather than on the verification of laws. This sort of work shows clearly the practical use of the experiment, prevents false notions of the mechanical advantage of machines, helps to make clear the importance of this concept in the world's work, and tends to develop in the student a hearty respect for the value of quantitative knowledge.

9. As few units as possible should be employed, and they should be introduced only when a necessity for their use appears; i. e., they should be justified in advance as in the case of definitions and laws. By this thesis the more abstract units, like the dyne and the erg, would no longer be required in the elementary work.

10. Examinations and quizzes should be framed to test the student's comprehension of and ability to use the more important principles of physics. The questions should not ask for mere statements of the laws from memory, unless they also ask either for the arguments by which the laws are estab-

lished, or for information concerning the way in which the principle is applied in daily life. These questions should not contain complicated arithmetical puzzles of the sort that never occur in practical work, but should contain simple problems, which deal with immediate concrete applications of the principles, and which are of the kind likely to be met with outside of the classroom or laboratory. They should not demand descriptions of laboratory apparatus nor of facts which have no immediate bearing on the general principles required by the syllabus.

II. The distinction between the real facts, which are matters of definite knowledge, and the supposed facts, which are derived from pure speculation, should be kept clear in the student's mind. For example, he should know that he is speculating when he explains the properties of gases in terms of the hypothetical molecules of the gas, and that he is dealing with definite knowledge when he describes those properties in knowable factors, like volume, pressure, density, and temperature. He should be trained to know what the things about him can do, rather than to think that he knows why they do it, because he has learned to repeat the beliefs of others concerning the *modus operandi*.

II. The following comments were called forth by the preamble to the definition of the unit in Circular IV:

Interest is not a necessary forerunner of knowledge (1). The ideas of force and of moments are better than that of energy as the central concepts (1). The scientific method is confused with induction (1). Too much historical physics is bad; on review, the student can be made to look up encyclopedias (1). Much more history is needed (4). On this point it seems desirable to quote a few sentences from one of the letters received, as follows: "It has long seemed to me that one serious defect of the teaching of science in our schools and colleges has been the apparent isolation of the subject-matter taught from the ordinary concerns of life. One way to remedy this defect is to provide carefully prepared courses in the history of each science and to teach these courses in connection with the courses in science themselves. In this way, the part that science has played in the development of our civilization, and all that it means to the world today, would be brought home to the pupils. Such a result could hardly fail to be a stimulus to the patient and serious study of the science of physics."

III. Concerning the definition of the unit, the following criticisms and suggestions were received:

One demands that the required time of the course be increased to 280 periods, while 10 declare 240 periods too much. Four want to see the requirement of lecture demonstration work emphasized more, 4 want all the laboratory experiments written up, and 4 more object to seeing the attempted determination of physical constants in the laboratory discouraged. Opinions

differ as to the number of laboratory experiments to be required. Four want 40; 1, 36; 2 think 35 enough; 7 unite on 30; and 3 ask for a requirement of only 20.

Some emphatic opinions were sent in with regard to the question of allowing part of the required laboratory work to be qualitative. In 6 letters the permission of qualitative experiments is hailed with delight, while in 4 others it is condemned in a no less decided way. One suggests that physics be taught in the natural history style, leaving the mathematical parts to the mathematics teacher, and another insists that the greatest value of the physics course lies in making clear the worth of definite quantitative knowledge.

In reply to question 1—namely, Does the definition of the unit seem to be what is needed?—34 out of 42 answered in the affirmative, and 8 made some suggestions as to changes.

Question 4—namely, Is the plan of starring topics more satisfactory than that of a list of experiments?—received 35 affirmative votes, and 2 negative. Two stated that it was a matter of indifference, 2 suggested using both, and 1 wished to have neither.

In consideration of the fact that the definition specifies only the minimum amount of work that will be accepted as a unit, and in the light of the suggestions received, this definition has been slightly altered and is again submitted for criticism as follows:

#### REVISED DEFINITION OF THE UNIT

1. The unit in physics consists of at least 200 periods of 45 minutes each (= 150 hours) of assigned work. Two periods of laboratory work count as one of assigned work.

2. The work shall consist of three closely related parts, namely, class-work, lecture demonstration work, and laboratory work. At least one-third of the time shall be devoted to the laboratory work.

3. It is very essential that double periods be arranged for the laboratory work.

4. The class-work shall include the study of at least one standard text.

5. In the laboratory each student shall perform at least thirty individual experiments, and keep a careful notebook record of them. Twenty of these experiments must be quantitative; each of these must illustrate an important physical principle which is one of the starred topics in the syllabus, and no two must illustrate the same principle.

6. In the class-work the student must be drilled to an understanding of the use of the general principles which make up the required syllabus. He must be able to apply these principles intelligently to the solution of simple, practical, concrete problems.

7. Examinations will be framed to test the student's understanding of

and ability to use the general principles in the required syllabus, as indicated in paragraph 6.

8. The teacher is not expected to follow the order of topics in the required syllabus unless he wishes to do so.

In explanation of the term "required syllabus," the commission voted at its meeting in New York to separate the proposed syllabus into two parts, one giving merely the principles required as a minimum amount of work, and the other an expanded and suggestive syllabus similar to that submitted in Circular IV. It is to the former of these that the term "required syllabus" refers.

In reply to question 2 of Circular IV—namely, is the form of the syllabus satisfactory?—1 negative and 35 affirmative votes were received. Five objected to having any syllabus at all.

Question 3—namely, Do you wish to have either the choice of subject-matter or its arrangement in the syllabus altered?—received 24 ayes and 18 nays. Those who want changes made have sent in a large number of valuable suggestions, and these will be submitted to the commission as soon as possible. In consideration of the marked differences of opinion that have appeared respecting the syllabus, the commission has decided to withhold the publication of the remainder of it, awaiting the results of a discussion now in progress in the commission. Those who have sent requests for the new syllabus will receive it as soon as it is ready for distribution.

IV. The suggestion in Circular IV, that there be introduced into the first year of the high-school curriculum an elementary course in general science, including some physics, has called forth some decided opinions. Three oppose the idea on the ground that it would take the edge off the real course in physics which comes later, and 4 others declare the proposition impractical because of the impossibility of getting the requisite time. Two claim that it has been tried in their schools and found harmful and 1 thinks that such a course belongs in the grades. One says that it should be required physiography. Four express the conviction that such a course should be worked up, 4 report having tried it with marked success, and 3 hope that such a course will be introduced in order that all the pupils in secondary schools may get at least a taste of science. (This latter in consideration of the fact that about 50 per cent. of those who enter the high schools drop out by the end of the second year.)

V. Since issuing the last circular, the commission has held two meetings, one in Chicago on November 30, and one in

New York on December 29. At the first of these meetings the question of the influence of examining boards on the teaching of physics was discussed. This discussion is still in progress in the commission, and the results of it will be announced as soon as they have been reached.

At the New York meeting two important matters were discussed: one, the form and content of the proposed syllabus; and the other, the nature of the problem before the commission. In regard to the first of these questions, the commission voted to prepare a double syllabus: one, to be very brief and to include only the principles required as a minimum of work for the unit; the other, an extended syllabus, intended to be suggestive, somewhat like that in Circular IV. In the first syllabus the attitude of the teacher toward each principle may be defined by several leading questions. The commission is now at work on these outlines.

In regard to the second question it was unanimously agreed that the commission stands for a maximum degree of freedom for the teacher; that its work lies in the direction of discussing and making clear the principles that may guide the teacher, and in supplying suggestions that may assist him in making his work stronger; that the teacher should be at liberty to apply the principles as outlined by the commission in the way he thinks best, and, in particular, he should be left in complete freedom in the choice of the tools with which he works. For these reasons the commission agreed to exclude entirely from its discussions all questions relating to the merits of particular texts, manuals, or apparatus. It is important that everyone should clearly understand that the work of the commission lies in the direction of solving an important educational problem, and that this work is to remain wholly free from implication in any way with books or with apparatus.

VI. On counting up the letters received by the commission during the past year, it appears that suggestions and criticisms have been received from 418 different teachers. Of these, 270 are in secondary schools, 113 in colleges, and 35 in normal schools. Every state in the Union has a representative among

this number, excepting Delaware, Florida, Idaho, Arkansas, and Nevada. Yet the only conclusion that all can agree to draw from the summaries of the answers as printed in the various circulars is that we teachers are far from united on any one point. Some insist on the introduction into the laboratory of a large amount of qualitative work; others are equally insistent that this work should all be quantitative. Some want to emphasize the ideas of energy; others prefer to base the work on concepts of force. Some approve of making the course strongly inductive, and of trying to teach scientific method of thought; others declare this method useless, and insist on mastery of subject-matter. Some declare that the course should be limited to pure science; others believe in making it more practical. Some wish to introduce more mathematics; others want to teach in the natural-history style entirely; etc.

Under these conditions, it seems fair to ask whether the reason for these wide diversities of opinion is not this, that we are trying to do too many things in the one year allotted to physics. If too much is expected of this one year's work, one teacher will emphasize one phase, another will cling to another, and there never can be even approximate agreement. It therefore seems plausible to adopt, as a working hypothesis which shall bring these discordant observations into harmony, the one just suggested—namely, that we are trying to accomplish too many different things in this one year. The aims of the course are at present too diffuse to be clearly grasped by anyone.

If we are willing to adopt this working hypothesis, a solution of the difficulty at once appears. This solution was suggested in one of the letters recently sent in, and is briefly this: that the teaching of physics must not be crowded into one poor year in the secondary school, but must be done partly in the grades in connection with the nature-study work, partly in a first year of general science in the high school, and partly in the special physics course in the later years of the high school, to be continued as far as desired in college. These successive bits must not overlap in such a way as to give the student the impression of going over the same ground in the same way, as is at



present the case. It therefore seems clear that the commission cannot ever reach a satisfactory solution of the problem before it, until it has discussed the entire question of the education of the child in physics in all grades.

Numerous efforts at earlier work in physics have been made in various schools during the past few years; the first step in the investigation is, therefore, to try to find out what work has already been done, and what success has been attained. You are therefore invited to contribute to this investigation by sending answers to any or to all of the following questions:

1. Has your school ever attempted to give a first year's work in general science? If so, what success was attained? What outline was used? What was the aim of the course? Where can the text or the outline used be obtained?

2. Do you think a well co-ordinated four-year course in science is desirable in the high-school, the first year to be of the general science type and required, the rest to be elective? This does not mean that there be a year in each of the separate sciences, but that at least the first year's work be in general science—a combination of several.

3. Can you suggest a series of steps in the method of presenting science—steps by which it would be possible to pass gradually from the nature-study methods of the grades to the abstract methods of the college? In what years in the curriculum should the successive steps be taken? This amounts to asking for a brief statement of the differences in the ways in which you would present science to a child of about ten, to one of fourteen, and to one of eighteen or twenty.

4. Have you any further criticisms or suggestions concerning the eleven theses?

5. Have you any further criticisms or suggestions about the definition of the unit as printed?

6. Would it strengthen the teaching of physics, if there were introduced a system of state certification of high-school teachers similar to that for elementary teachers? If so, what would you suggest as the minimum requirement for a certificate that would entitle the holder to teach physics in the high school?

Since sending out the last circular other associations have added representatives to the commission as follows:

The New England Association of Colleges and Preparatory Schools, E. H. Hall, Harvard University, Cambridge, Mass. The Association of Colleges and Preparatory Schools of the Southern States, C. A. Perkins, University of Tennessee, Knoxville, Tenn. The Northeastern Ohio Association of Science and Mathematics Teachers, F. T. Jones, University School,

Cleveland; G. R. Twiss, Central High School, Cleveland; C. H. Burr, Oberlin Academy, Oberlin. The North Dakota Association of Science and Mathematics Teachers, E. Burch, President of the State Science School, Wahpeton; Miss D. C. Jensen, High School, Fargo; C. C. Schmidt, Superintendent of Schools, Jamestown. The New York State Science Teachers Association has increased its committee by the addition of E. W. Wetmore, State Normal College, Albany; L. E. Jenks, High School, Ogdensburg.

This circular is being sent once more to all the addresses we have. Any further documents that may be issued will be sent only to those who respond in some way to this one. Back numbers of the circulars may be had on application, in case any have been lost in the mail. Since a number have suggested that more discussion would be possible if more time were allowed for the answers, the date for their final return is set as June 1. As before, they should be sent to C. R. MANN, UNIVERSITY OF CHICAGO.

## DISCUSSION

### WHAT ARE HIGH-SCHOOL PUPILS READING?

MILNOR DOREY

English Department, Trenton, N. J.

This article does not propose to suggest a course of reading for high-school pupils: the woods are full of them. It does propose to argue that the younger generation is not on "the primrose way to the everlasting bonfire" as a result of its own selective reading.

Not long ago, in the above high school, the pupils of the second- and third-year classes were asked to hand in the names of six books which they enjoyed reading, such books to represent six different authors. The first-year class was not asked to do this because it was assumed that they had just been weaned away from the *Wonder-Book*, *The Psalm of Life*, and the *Jungle Book*, and that their experience as high-school pupils had not yet taught them to deviate from the straight and narrow way. The seniors were not asked because it was tacitly understood that all would immediately exhibit a preference for Burke, Milton, or Macaulay, uniformly agreeing on Shakspeare as "Daily Food."

These are the facts: In the second-year class, numbering 175, 2 per cent. named the *Pansy* books, *John Halifax*, *Gentleman*, *Raffles*, *Red Rock*, Owen Wister, Seton-Thompson, *Donovan*, Major, *The Little Shepherd of Kingdom Come*, *Eggleston*, *David Harum*, *Eben Holden*, *Hugh Wynne*, Stoddard, *Aesop's Fables*, Stanley Weyman, Wells, and some of the later novels. Strangely enough, one named the *Iliad*, another, Hood's poems, Victor Hugo, and, *mirabile dictu*, the works of Mrs. Ward and John Ruskin! But one named Jules Verne, *The Last Days of Pompeii*, and Mark Twain.

Five per cent. named McCutcheon, Marion Crawford, Paul Lester Ford, Marie Corelli, *Mrs. Wiggs*, Dumas, Conan Doyle, the Henty, Blanchard, Hildegard, Castlemon and Elsie series, Hall Caine, Frank Stockton, *Hope Loring*, *Lorna Doone*, Davis, Otis and Oliver Optic. Two pupils named *Gulliver's Travels*, Bryant, *The Vicar of Wakefield*, E. P. Roe, Field, and Riley, and only two, Captain King and Mary Mapes Dodge. Ten per cent. named *Tom Brown's School Days*, Horatio Alger, Tennyson's *The Princess*, Kate Douglas Wiggin, Lowell, *The Lamplighter*, Bunyan, Eliot, Defoe, *The Swiss Family Robinson*, Cooper, Charles Lamb, and (praise be!) Franklin's *Autobiography*.

Fifteen per cent. named *Uncle Tom's Cabin*, Churchill, *The Man With-*

out a Country, Washington Irving, Stevenson, and Whittier. Twenty per cent. named *Ben Hur*, Dr. Holmes, Rose Carey, *Silas Marner*, and Hawthorne. Twenty-five per cent. name *Ivanhoe*; 40 per cent. Dickens and Shakspeare; and 50 per cent., Longfellow.

In a case where only the author is mentioned, all of, or at least his most popular, works are implied, *The Scarlet Letter*, *Elsie Venner*, *The Mill on the Floss*, *The Sketch Book*, *Sherlock Holmes*, *The Christian*, *Treasure Island*, *The Tale of Two Cities*, *David Copperfield*, *The Merchant of Venice*, *As You Like It*, *Hamlet*, *Macbeth*, etc., leading. In regard to poems, "Thanatopsis," "Snow Bound," "Evangeline," "Voices of the Night," "One Hoss Shay," and "The Courtin'," led the way.

In the third-year class, numbering 150, 20 per cent., named Hawthorne, Bryant, Thackeray, Stevenson, Poe, Tennyson, Hugo, Franklin, Burns, Whittier, Riley, Irving, Dr. VanDyke, *Ben Hur*, Owen Wister, *Mrs. Wiggs*, the *Elsie* books, Rose Carey, *Donovan*, *The Lamplighter*, *Lorna Doone*, *The Clansman*, *Janice Meredith*, Amelia Barr, H. H. Jackson, Mary J. Holmes (!), *Dorothy Vernon*, *The Christian*, Margaret Deland, Page, Mrs. Wiggin, Oliver Optic, *Black Rock*, *The Pit*, Mrs. Ward, *Tom Brown's School Days*, Marie Corelli, *The Ancient Mariner*, Louise Alcott, E. P. Roe, *Quo Vadis*, *The Lady or the Tiger*, *When Knighthood Was in Flower*, *Last Days of Pompeii*, *Uncle Tom's Cabin*, *To Have and to Hold*, the Henty and Alger books, *Elegy in a Country Churchyard*, and again, *mirabile dictu*, Spenser's *Faerie Queene*, and Browning!

Five per cent. named McCutcheon, Crawford, Conan Doyle, Churchill, Dr. Hale, and Cooper, and many had at least one of the most recent novels on their list; but fully 25 to 50 per cent. named Lowell, Dickens, Holmes, Eliot, Scott, Longfellow, and Shakspeare. In this class there was a more mature selection of the plays of Shakspeare, a wider acquaintance with Longfellow, Scott, Dickens, and Eliot, and an apparent preference for the more analytical novels and poems. *Romola*, *Oliver Twist*, the *Bigelow Papers*, *Kenilworth*, *Outre Mer*, *The Tales of a Wayside Inn*, *Prue and I*, etc., were noticeable.

While it is obvious that the gradation of choice for classic over popular works exists in the second and not in the third year, yet it can be safely said that three-fourths of the combined class prefer "standard" authors.

What is the significance of this? Surely not the fact that our pupils' reading is in a deplorable state. True enough, a certain allowance must be made for those who made out their lists as they did because they had read no others; for those who named only "standard" writers in order to please their teachers, or because they were studied in class; for those who because of outside employment or home environment made incomplete or cheap lists; and for those who may have read none of the books indicated. But in this experiment the writer believes that the number of these cases is small. Other

schools may have other results, although it is safe to say that the school in question is fairly representative in this matter.

It will be noticed that biography, essays, history, and works of science were not asked for, the purpose being primarily to find out what sort of fiction was preferred. The poetry was for the most part voluntary. As was to be expected, the younger boys largely chose books of adventure, and the younger girls, the sentimental romances; the more mature pupils of both sexes leaned toward the wholesomeness of Stevenson, the simplicity and good cheer of Longfellow, the wisdom of Shakspeare, and the humor of Holmes. In many cases most of the works of a novelist were given and an order of preference was stated; many chose to indicate certain poems rather than give merely the name of the writer.

Nevertheless, there is much missionary work to be done, despite the encouragement taken from the experiment. It is a very joyful, profitable experience to size up your boy or girl, and when, as a matter of course (or duty?), you have directed him or her to Hawthorne, or Emerson, or Eliot, or Shakspeare, you should then give them J. M. Barrie, or James Lane Allen, or Mrs. Deland, or Hamlin Garland, Bret Harte, Goethe, Kingsley, Charles Reade, Mary Wilkins, Paul Heyse, Thomas Bailey Aldrich, *A Boy's Town*, La Motte-Fouque, Miss Gilder, some sound biographies, Malory's *Morte D'Arthur*, Froissart—well, you know the list. However, it must be said that these lists were compiled previous to any missionary work; the missionary work in certain quarters was done when the information came in. As a result, book reviews or estimates four times a year are required of the pupils, of books recommended or approved by the teachers, and in this way a tab is kept on the pupil's reading apart from the regular English work and its requisite outside list.

After all, the questions may arise: If this is a universal case, how much of it is really due to the pupil's selective taste, the teacher's, home environment, the signs of the times, or the present course of study—notably the "College Entrance Requirements"? By the way, out of the forty books in the six groups indicated by this committee, twenty-six were chosen by these pupils without any knowledge of such a list. Might it not be wise for the committee to make out its recommendations from the pupils' lists? Let us not yet hold up our hands in horror at the huge number of embryo "Diamond Dicks"—it is not so formidable. As to the above questions, "that is another story."

## EDITORIAL NOTES

One of the latest contributions to the problem of college entrance requirements is found in the *Thirteenth Annual Report of the Schoolmasters' Association of New York and Vicinity*, which contains several addresses and brief reports of discussions bearing on this general topic. Principal Wilson Farrand asks, "Are college requirements too great in quantity?" and answers the question "unhesitatingly in the affirmative." Using the Columbia scale of points, he estimates that the entrance requirements for Princeton and Yale amount to something over 16 points, and for Harvard 17 or 18 points. Columbia requires 15, and a group of colleges, such as Cornell, Amherst, Williams, and others, require 14. Western institutions are not mentioned by Principal Farrand, but they present a somewhat similar range of variation in requirements. Preparatory schools, however, must plan their courses in most cases for the colleges requiring the maximum preparation.

Sixteen points of work call for twenty periods a week for four years. The "Committee of Ten named twenty periods a week, but stipulated that this was to be the maximum, not the normal number," and also further stated "that where the full number of periods was given at least five of the twenty should be unprepared." "It appears to be the assumption of the colleges that they may reasonably frame requirements demanding 20 prepared recitations a week." "On the strength of the committee's report the colleges are demanding what the Committee of Ten never dreamed of authorizing." As to the allowance of time for individual subjects, "almost any one of the required subjects can be covered in the time allowed, provided the demands in other directions are not too great; but the sum total of them all is more than the ordinary boy or girl can wisely or reasonably be expected to carry." They not only leave small time or no time for any studies besides the college requirements, but they prevent by their quantity the best quality of work in the very subjects offered.

A special feature of the difficulty is the proportion of the required work that must be done in the last two years. "No arrangement of a course of study, no beginning of Latin and Geometry earlier, has yet succeeded in making a sixteen-year-old mind eighteen years of age." The congestion in the last two years distracts the student's mind, and the quantity of work to be covered is so great that proper assimilation is impossible.

The indictments brought by Principal Farrand were almost without exception concurred in by other papers and by the discussions which followed them. Mr. Farrand proposed three remedies for consideration. First a

halt in the increase of requirements which has been going on for several years. Instead of using the time gained from better work in the elementary schools to do more of the freshman work in the high school, "we plead to be allowed to use this time for improving the quality of what we are already doing." The second proposal is that the colleges cut off some of the recent additions of individual subjects. The College Entrance Examination Board is setting a definite standard of attainment in the different secondary school subjects higher than that generally enforced hitherto by the individual colleges. This "makes it possible to reduce the quantity demanded without any lowering of standard." Whether the reduction be made in Latin and Greek composition, in algebra, in geometry, in making physics more descriptive and less mathematical, or in shortening the period covered by ancient history, is a matter for later discussion. The third proposal is one which Mr. Farrand makes without much hope that it will be accomplished. It is that one or more of the leading colleges should "squarely face the situation and reduce the requirements to 15 or even 14 points."

It is noteworthy that the discussion on the part of all who are represented in the report proceeds almost entirely from the intellectual considerations. We believe that a very strong reinforcement of this position could be made from the standard of the health of boys and girls, particularly of the girls. The women's colleges of the country probably graduate their students in better physical health than they had at entrance. Few would make this claim for the secondary schools. The high-school period, it is commonplace to say, is the more critical period in determining the health of women. Another line of criticism which is in some degree closely related to the last is the narrow range of subjects which are as yet regarded as proper subjects for recognition by college entrance requirements. History, language, mathematics, physics, are the only subjects recognized by many colleges. Manual training or shop work, domestic science, drawing, music, have little or no sanction as forming any proper part of the education of young people. It may be granted that in many cases these have not yet been well organized. But those who have kept close enough to the growing life of boys and girls to appreciate its need for expansion along other than narrow academic lines and to deprecate the atrophy of any faculty; those who have seen the vigor and accuracy demanded by well organized shop work; or, finally, those who believe that our secondary schools are failing to give adequate preparation for American citizenship unless they utilize their opportunity to interest boys and girls in the simpler aspects of social needs and forces—all these will join in the conviction that our high-school curriculum needs reshaping in the subjects studied as well as in the quantity of work required.

## BOOK REVIEWS

*The Text of Shakespeare.* By THOMAS R. LOUNSBURY, L.H.D., LL.D., Professor of English in Yale University. New York: Charles Scribner's Sons, 1906. Pp. 59. 8vo. \$2.

Matters of minute textual criticism are with good judgment eliminated from secondary-school work in Shakspeare; but questions of a general nature often arise in class that demand intelligent answers: How is it that there are such variations in different editions? Why didn't Shakspeare, who lived in the age of printing, fix his own text, and not suffer from corruptions like the authors who flourished in the age of manuscript? What is the difference between "quartos" and "folios"? And why did Shakspeare, like all the rest of the Elizabethan dramatists, except perhaps Ben Jonson, seem to have no interest in his plays after he had once got them acted? How has the text of our school editions been made up, if Shakspeare left no manuscripts and didn't oversee his printing?

In compact compass and authoritative form Professor Lounsbury's book provides satisfactory answers for all these questions, and more. With perhaps no interest in the literary quarrel between Pope and Theobald (the first editors of Shakspeare, after Rowe), the reader will find himself enticed into an important Shakspearean question by Professor Lounsbury's alluring and fascinating presentation of what would seem at first sight dry and uninteresting facts. His "penitential" reading in the "interminable bog of periodical literature" of the eighteenth century has thrown a flood of new light on absurd literary traditions and exposed errors that have persisted to the present day, especially in regard to the quality of Theobald's work and to the character and influence of Pope. The story of the original "Dunciad" of Pope and its bearing on the Shakspeare question is here told for the first time; so that it becomes tolerably clear how it happened that the one man, whose extensive learning and exceptional acumen have done more toward rectifying the text of Shakspeare than has been effected by any single editor since, should have gained the reputation of being extraordinarily dull—chiefly through the duplicity, malignity, and prestige of Pope.

The secondary teacher, however, will be more interested perhaps in the introductory chapters on the state of the drama in Shakspeare's time, on the dramatists' attitude toward their plays, and on the differences in the early texts and the first editions—information not so new, but brought together here for the first time in readable shape. He will see how the text as a whole was in a distinctly worse condition in the latter part of the seventeenth century than it was in the earlier part; and he will see, too, how the establishment of the right reading was at the outset attended with difficulties of which we at the present time hardly dream. "It was not merely that the knowledge of words, or of meanings once belonging to words, had been lost; it was not merely that much of the grammar of the Elizabethan period was no longer understood; there was complete ignorance of the methods which needed to be employed to



rescue the text from the corruption into which it had been plunged by the ignorance of typesetters, the indifference of proofreaders, and the incompetence of editors." Since the beginning of the nineteenth century those methods have been in the possession of specialists; and of their application of them every reader of a school edition now enjoys the fruits. If a pupil wants to know about any of these questions, his teacher ought to be able to tell him; if his teacher cannot tell him, this book will enable him to.

GEORGE H. BROWNE

BROWNE AND NICHOLS SCHOOL  
Cambridge, Mass.

*Principles of Botany.* By JOSEPH Y. BERGEN and BRADLEY M. DAVIS. Boston: Ginn & Co.

This book comes to us as a revision and enlargement of Professor Bergen's *Foundations of Botany*—a change amply justified by the result, provided that the aim was to write the old book up into the class of college textbooks of botany.

The volume is made up of three parts: Part I, "The Structure and Physiology of Seed-Plants;" Part II, "The Morphology, Evolution and Classification of Plants;" Part III, "Ecology and Economic Botany." Of these, Parts I and III are by Professor Bergen, and Part II by Dr. Davis.

Professor Bergen's contribution is essentially *The Foundations of Botany* minus the directions for experiments, the chapters on cryptogams and the flora. It is very noticeable, however, that the author has made a careful revision of the old text. More or less scattered paragraphs have been brought into correlation, as in chap. 5, "The Properties of the Cell;" bits of new matter have been added here and there, as in chap. 2, the discussion of ferments and enzymes; topics have been elaborated and recast into more technical form, as the discussions of photosynthesis, adaptation, variation, and mutation. Chaps. 40 and 41, "Hybridization," "Plant Breeding and Economic Botany," are new and valuable additions, and bring the book into touch with the very practical side of botanical science as exemplified by the work of Luther Burbank and the agricultural experiment stations.

The topics protoplasm and classification have been turned over to Dr. Davis for treatment in Part II.

The whole revision has been toward greater precision and succinctness of statement, and has resulted in a more scholarly work.

Notwithstanding the addition of considerable new matter, the boiling-down process has kept the amount of text just the same as in the old book, while an addition of four lines to the length of the page makes the new text appear to be thirty-six pages shorter than the old.

The most conspicuous feature of the new book is the treatment of Part II by Dr. Davis. The old chapters on the cryptogams have been entirely rewritten, and much new matter has been added. The subject is here raised to the dignity of a treatise, is handled in a scholarly manner, smacks of the results of recent research, abounds in good type-forms, and is generally clear and accurate in statement.

Dr. Davis introduces his work by a brief statement of the principles of

morphology, classification, and organic evolution. He then enters upon a discussion of the cell as the unit of life and structure.

Following the method of evolution, he traces the development of the plant body through the flagellates, the algae, bryophytes, pteridophytes, and spermatophytes. The thalloid degenerates are gathered for convenience into the series algae, and then their diverse relationships, or lack of relationship, are explained.

Frequent summaries throughout the text treat carefully of the origin and relationship of all the classes, and are as noticeable for what they refrain from saying as for what they say.

The return to the use of the term "chromatophore" is unfortunate and confusing. The idea, clearly given (pp. 205 and 213) that the red and brown pigments in the so-called chromatophores do the work of photosynthesis is not warranted by botanical research; therefore, to make color the basis of the notion is to take a step backward and revert to Murray's chlorophore, phaeophore, and erythrophore.

The author illustrates the resulting confusion by referring to the "chloroplastids of funaria" (p. 161, Fig. 169), and the "chromatophores of a moss" (p. 165, Fig. 169).

While the author's English is of a high order throughout, his reference to "sealed tinned foods" and "the canning industry" is likely to cause a smile.

Aside from the summaries already referred to, special commendation is due the treatment of the topics: fermentation, gametophytes of lycopodium and selaginella, double fertilization and xenia, and the frequent footnotes referring to economic publications of the Department of Agriculture. The cuts are generally excellent, a few, notably 198, 221B, 237, 241, 253B, are poorly drawn. It is a pleasure, however, to see so many original ones.

As a whole, the book forms an excellent treatise on the elements of botany. Its completeness, technical treatment and absence of all laboratory work—even though that be supplied in the form of a separate manual—remove it from the class of high- and normal-school texts and place it clearly in the class of college books.

I. N. MITCHELL

MILWAUKEE STATE NORMAL SCHOOL

*Animal Micrology: Practical Exercises in Microscopical Methods.* By MICHAEL F. GUYER. Chicago: University of Chicago Press, 1906. Pp. 340, numerous illustrations of apparatus. \$1.75.

The topics discussed in this book are as follows: necessary apparatus; preparation of reagents; general statement of methods; killing, fixing, imbedding, sectioning, staining, and mounting; minute dissections; tooth, bone, and other hard objects; injection of blood and lymph vessels; *in toto* preparations; blood; bacteria; embryological methods with chick, etc.; and reconstruction from sections. There are five appendices (95 pages) with the following titles: "The Microscope and Its Optical Principles;" "Some Standard Reagents and Their Uses;" "Table of Tissues and Organs with Methods of Preparation;" "Preparation of Microscopic Material for a Course in General Zoölogy;" "Table of Equivalent Weights and Measures."

This is a book meant for the beginner. It may be used as a class textbook, as a guide to individual research workers, and as a help to all teachers of zoölogy, histology, or embryology. As a textbook it can hardly be improved. The author has had ten years of practical experience in teaching microscopical technique, and has produced a series of seventeen chapters that are logically arranged and contain practical, definite statements of essential things. Memoranda are appended to each chapter. In these the student will find the material necessary to elaborate the methods given in the course of the regular work. After the student has completed this course, he will be fully equipped, as far as this subject is concerned, to begin research work that calls for microscopical technique, or to go out as a teacher of elementary histology, embryology, or zoölogy. With this book as a beginning he can without help study the involved special methods found in such works as Lee's *Microtomists' Vade Mecum* and Hardesty's *Neurological Technique*, etc. Besides this the student is given in Appendix A a concise non-technical statement of optical principles which will help him get the maximum results from his microscope and will serve as an introduction to larger works, such as Gage's *The Microscope*.

The research worker will find in this book just the information he frequently needs in preparing material with which he is not familiar.

The teacher of zoölogy will value Appendix D (pp. 215-26), which has been incorporated for his special benefit. These pages tell him how to prepare slides and other material of the many groups of animals.

On looking over the book the advanced student cannot help but wish that it might have been available when he began his work.

*True Bird Stories from My Note-Books.* By OLIVE THORNE MILLER. With illustrations by LOUIS AGASSIZ FUERTES. Boston and New York: Houghton, Mifflin & Co., 1903. Pp. 156.

These stories are of special interest as the author tells us in the preface that they are strictly true. This fact gives the book a place apart from the many nature-study books that are now flooding the market. These latter either give their subjects human attributes or else a remarkable command of the English language. Mrs. Miller tells the simple events in the lives of a dozen birds that she received from bird-stores in New York and Brooklyn and kept during the winter in part of the house called the "bird-room." The captives were liberated in the country when the other birds came back from the south in the spring. The stories are delightfully told, and both old and young are sure to enjoy reading or hearing about "The Bird That Would Not Be Free," "The Baby Robin," and "The Saucy Oriole." Fifty pages are also devoted to birds out of doors. The stories are short, and more than twenty kinds of common birds figure in them. They would serve admirably as reading-lessons at any time during the winter or spring, and give just the material that is often desired when children have learned to know a bird and want to hear more about it. Mr. Fuertes has furnished nine full-page illustrations which add to the beauty of the book.

NORMAL SCHOOL  
River Falls, Wis.

R. W. HEGNER

*The Higher Study of English.* By ALBERT S. COOK. Boston: Houghton, Mifflin & Co., 1906. Pp. 145. \$1.

The group of addresses and essays by Professor A. S. Cook, of Yale, now published under the general title of *The Higher Study of English*, is a partial record of the author's contributions to the better teaching and study of English in the United States. For the past two decades Professor Cook has been prominent among the men who have given stimulus and intelligent direction to this work, both in colleges and in secondary schools. The present volume contains a study of the province of philology, an essay on the teaching of English, an exposition of the relations of words and literature, and an inquiry into the needs and standards of graduate study in English.

All of these papers are prepared rather for the specialist than for the lay reader. But they are neither dull nor over technical. In the author's view English literature is not a dry-as-dust subject, or the exclusive property of the scholar. He urges on the one hand, that scholarship must not divorce itself from the aesthetic and ethical elements of literature; for literature expresses the higher ideals of the race, and is thus its greatest treasure. This view of the subject has been that of the great philologists. On the other hand, he censures the superficial and indolent kinds of study, and shows that the severe methods of the true scholar are the road to full appreciation. "The fundamental problem in the teaching of English is," he says, "how to combine discipline with delight." Upon the question whether English can be taught his comment is apt: "Suppose we change the terms, and ask, not whether literature can be taught, but whether people can be taught by means of literature."

The book is not only richly suggestive to teachers of English, but to us of the present generation it is especially interesting for its historical placing of our subject: first, against the general background of earlier linguistic and literary study; and, secondly, against the immediate background of the past twenty years, within which time these studies have been rapidly expanding and taking form.

TEACHERS COLLEGE  
Columbia University

FRANKLIN T. BAKER

*The Human Mechanism: Its Physiology, Its Hygiene, and the Sanitation of Its Surroundings.* By THEODORE HOUGH and WILLIAM T. SEDGWICK. Boston: Ginn & Co., 1906. Pp. 9+564.

This is a textbook of hygiene on new lines. Anatomy, both gross and microscopic, is reduced to the lowest terms, and the emphasis of the book, as stated in the preface, is placed on physiology, hygiene, and sanitation—on function and conduct.

The first half of the book is given up to a discussion of physiology, with such reference to anatomical structure as is necessary for a proper understanding of the functioning mechanism.

The second part of the book is given up to the discussion of personal hygiene and sanitation. The chapter on the sense-organs is particularly clear, and should be of great value to teachers of young children.

In the discussion of muscular activity and exercise the authors show a grasp of the essentials of physical training and a discriminating sense of relative values that are refreshing in a book of this character. The conclusion that a "certain amount of general activity is a condition of healthy living" is no less admirable than the means suggested for securing and maintaining physical health by exercise.

The treatment of the subject of drugs, alcohol, and tobacco places this book in a class by itself among school hygienes. The very moderation and sanity of the discussion lend force and a power of conviction to the conclusions that must have the greatest influence on the attitude of the student toward the use of these substances.

The chapters on domestic hygiene and public hygiene and sanitation epitomize in a form available for use in the classroom the latest knowledge on these subjects.

An adequate and carefully compiled index is an important part of the work.

It is impossible in the space available to mention in detail all the good features with which this book abounds. It seems to be altogether the best work upon the subject for use either as a textbook or for private reading.

JOSEPH E. RAYCROFT

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*Das wissenschaftliche Studium der deutschen Sprache und Literatur: Ein Wegweiser für Studierende.* Von DR. PHIL. HEINZE HUNGERLAND. Z. z. Lektor der deutschen Sprache an der Universität zu Lund. Lund: Gleerupska Univ.-Bokhandel. (Hjalmar Möller); Heidelberg: Otto Ficker, 1906. Kr. 1 = M. 1.12.

The purpose of the booklet is—as the title indicates—to be a guide to the student of Germanics at European universities. It not only marks out the shortest path through a field that to the beginner must appear bewildering and discouraging in its vastness, but also guards the more advanced student from the narrowness caused by too early specialization. Any one-sided training, however thorough, is no longer an adequate equipment for the German teacher of today. His knowledge of German must be of the broadest, embracing an acquaintance with all aspects of German life and culture, past and present.

For such teachers of German in our high schools as either have not had the advantage of a college preparation in their subject or have been called out into the practical field before completing it, attention is called to Dr. Hungerland's pamphlet on the higher study of German. By consulting the *Wegweiser*, when looking up some special point of interest or when resuming their studies, they may save themselves time and labor.

Dr. Hungerland lays no claim to completeness, nor does he desire to compete with large compendia such as Paul's *Grundriss der germanischen Philologie*. He gives a list of only the most important publications, briefly characterizing his classification. Herein lies the special value of the book for the busy American high-school teacher. The field which he covers will best appear from the headings of the various chapters: "Phonetics;" "Method of Linguistic Study;" "The Study of the Grammar of the Older Germanic Dialects and the

Interpretation of Texts (both for Beginners); "The Study of Advanced Grammar (the Older Dialects); "Readers for Advanced Students;" "New High German Grammars;" "Awakening a Perception of the Niceties of Style;" "Accuracy of Expression;" "Works on Semasiology;" "Dictionaries;" "History of the German Language;" "The Psychology of Language;" "Relation between Literary History and Linguistics;" "The Study of German Literature for Beginners;" "The Study of German Literature for Advanced Students;" "Meters and Versification;" "Culture History and 'Realienkunde';" "German Character and National Life as Reflected in German Literature;" "Novels;" "The German Short-Story;" "Lyric, and Epic Poetry;" "The German Drama;" "Scientific Journals."

To the list of phonetic books given may be added for American students: George Hempl, *German Orthography and Phonology* (Ginn & Co.); Laura Soames, *An Introduction to Phonetics* (English, French, and German); new edition revised by Wilhelm Viëtor (Swan, Sonnenschein & Co., London, 1899); Rippmann, *Elements of Phonetics* (English, French, German), translated and adapted from Viëtor's *Kleine Phonetik* (London, 1899).

UNIVERSITY OF CHICAGO

PAUL O. KERN

*Practical Business Arithmetic.* By JOHN H. MOORE, and GEORGE W. MINER. Boston: Ginn & Co., 1906. Pp. viii+449 pages.

In this new *Business Arithmetic*, designed for use in commercial schools and the commercial departments of high schools, it has been the aim of the authors "to develop arithmetic as an effective tool for rapid and accurate calculation; to cultivate the ability to apply this tool in the solution of practical problems of business and everyday life; to give a thorough knowledge of common business forms, expressions, and abbreviations; to enable the pupil to realize the educational value of the subject."

Throughout the book, but especially in the pages devoted to the four fundamental operations, there are many special devices and an abundance of examples well calculated to train the student to rapid and accurate calculation. The practical nature of the problems, many of which are in the form of business documents taken from actual transactions, correlate the subject with the business activities of the day, and, together with the great variety of business forms introduced into the text, make the subject as real and vital as it is possible for a textbook to do. The student will gain insight into business methods and much valuable information from the study of this book.

It is not overburdened with definitions or rules, and the authors have wisely omitted such obsolete topics as compound partnership, true discount, etc. The rule for the area of a rectangle, "The product of the length and width of a rectangle equals the area," is open to criticism, and it does not correspond to the illustrative example. A similar exception may be made to the other rules for finding areas and volumes.

The book is well graded, and a maximum amount of mental work is encouraged. It is large, and evidently meant for schools where much time is devoted to the subject.

PUBLIC SCHOOLS  
Riverside, Ill.

A. F. AMES

*Latin Grammar.* By WILLIAM GARDNER HALE and CARL DARLING BUCK.  
Chicago: Atkinson, Metzer & Grover, 1905.

The evolution of our Latin school grammars has been slow, and they all bear upon their pages the impress of two thousand years of tradition. It is no small task to adjust to present conditions (not to speak of reorganizing or reconstructing, a system of presenting the facts of language that has not only become ingrained in the minds of classical scholars, but has even permeated those of the educated public in general. Yet the rise of the historical method of studying language is making itself felt, though but slowly. It is already leaving behind its earlier stage, which by laying undue stress upon the time element produced what may be termed not inappropriately the "chronological" grammar (for example, Draeger's *Syntax*). Students of Latin grammar are coming more and more to approach their subject from the point of view of general linguistics, and are rapidly assimilating the truths revealed by this branch of language study and by comparative philology. The earnest student of Latin in America cannot help but feel great joy at the steady improvements that the last ten or fifteen years have seen in our school grammars, and a certain pardonable pride in their growing individuality and relative independence of foreign models. The authors of the grammar that forms the subject of this review have striven to produce a book that would be recognized by competent authorities as fully abreast of the times, and it is difficult to conceive of the men who wrote the *Oscan-Umbrian Verb-System* and *The Cum-Constructions* as falling far short of their ambitions in this respect. It is unnecessary to enumerate the excellencies of this book. If one adds to its general "up-to-dateness" the many innovations (in nearly all cases improvements) in which the authors are, so to speak, in advance of the times, he will be able to form an approximately fair estimate of its value. To one point in particular the attention of teachers cannot be too frequently directed. The authors are to be most heartily congratulated for having adopted the policy of departing from the traditional nomenclature and traditional methods of presenting facts, where the retention of the old would involve inadequate statements or misunderstanding. Our present deeper insight into the nature of language has taught us the perversity of the older so-called "logical" method of viewing language—a method which has lent a coloring to nearly all our traditional technical terms. To illustrate, it has been the traditional practice in school grammars to bunch together under the category "concessive" a variety of subordinate clauses and independent sentences differing widely in meaning. Although in some of the more recent grammars much improvement was made in the treatment of this group of constructions, yet in the Hale and Buck book they have received more discriminating treatment than ever before. The use of more exact technical terms cannot fail to be helpful to the pupil. He comes to them with an impressionable mind untrammelled by tradition. He has few old and incorrect ideas to revise or forget. It is only upon the teacher that such a book as this makes demands; and no teacher who is broad-minded and ambitious will fail to make every effort to emancipate his mind from a faulty system of presentation which he may have learned in college or university and to which he has become enslaved.

If the right to criticize may be assumed by one who has never written a Latin grammar, and who may therefore be assumed not to be in an ideal position to pass judgment in the matter, the reviewer would venture the suggestion that the authors have not gone far enough in their innovations. I would not so much urge that a larger number of exact technical terms be introduced,<sup>1</sup> that the meanings and uses of the forms be still more carefully and accurately described in plain and simple English, and that the language used should even more perfectly reflect the point of view taken by the more recent investigators of language. Would it not be better to do as many have done, and omit all attempt to give a definition of a sentence, than to employ one which is after all only a slight modification of the old "logical" definition? Is not the statement §221, e, "Latin has no article," misleading in the same sense as that other generalization so often met (not, however, in this grammar), "Latin has no word for 'yes' "? Undoubtedly the use of the phrase "dative of agent" is justified, but would it not be better to add to §373 a note of explanation corresponding to note *a* in §371? Again, the vague ideas that cluster about the word "tense" in the minds even of most university students, and consequently of many teachers, would seem to justify a more adequate definition of the word than that given in §465, which appears, at least, to contradict the analysis carried out in §466. Possibly a brief statement of the difference between modality (*Actionsart*) and tense in its traditional sense would not be out of place, even though special forms for expressing *Actionsart* are not so fully developed in Latin as in some other languages. §271, II, *a*, the statement of the meaning of *iste* needs slight modification and the remark about *is* is misleading.

But it is not the purpose of this review to point out what may appear to the writer to be specific excellencies and defects. He would rather earnestly commend the book to the careful study of those secondary teachers who are not already familiar with it. A systematic and detailed comparison of this grammar with any of our better school grammars cannot fail to be a source of much profit to the intelligent teacher, even by virtue of the difference in points of view and aside from any question as to which point of view may enable the author to give the young pupil a more faithful picture of the language. Such a comparison would stimulate the teacher to the exercise of more independent judgment, impress him with the necessity of studying each specific case he meets in the light of its own particular setting (context), and so enable him to bring a less prejudiced mind to the solution of the daily problems of his classroom. We hope that the promised "Appendix" will be issued in the very near future.

C. L. MEADER

UNIVERSITY OF MICHIGAN

<sup>1</sup> Because they foster a tendency to mechanical interpretation.



## QUESTIONNAIRE ON PROMOTION.

Answers to the questionnaires should be sent to

CHARLES S. HARTWELL,  
473 Madison St., Brooklyn, N. Y.

DEAR SIR:

President Charles W. Eliot, of Harvard University, as quoted in Superintendent William H. Maxwell's Seventh Annual Report to the Board of Education of New York City, at page 221, has adequately stated the position of those who demand greater flexibility in requirements for promotion, as follows:

"We have reaped now in the public-school system all the benefits of system and uniformity, and it is high time to superinduce in the American school the opposite benefits of flexibility and variety."

1. In your schools is there much flexibility and variety?
2. Do you promote your students by subjects or by grades?
3. Do you make a student who has failed in some of the work of the grade take all the work of the grade again?
4. Do your schools take care of the individual student's needs in any way?
5. Do you think each student should be advanced as rapidly as his ability will permit without reference to his fellows?  
If not, why not?
6. Should the brilliant student be kept back with the dull student?  
If so, why?
7. Should a student be given extra credit for superior work?  
If so, on what basis?
8. Would individual programmes result in greater interest and a better quality of work?
9. Do you regard the quality or the quantity of a student's work more important?
10. Would an advantage given to a bright student discourage or injure a dull one?
11. Under a flexible scheme would a precocious student be prepared for life too young?
12. Should the brilliant student take more or less work than the dull student?
13. Would the flexible plan help to do away with the mechanical teacher?
14. Would it be just as practicable to maintain the flexible individual plan in a large school, where the working force is greater, as in a small school?
15. Do you favor the advancement by subject plan?  
If not, what are your objections to it?
16. Do you know of a better plan?  
If so, what is it?
17. Would you like to have this topic discussed at an early N. E. A. meeting?

18. What proportion of the pupils that leave your school or schools are recruited from those who are compelled to repeat tasks once satisfactorily done?

19. What percentage of "left back" or "left down" pupils are promoted the following term?

20. Do you approve the following Rules 1 and 2 of the New York City Board of Education, in force since May 3, 1904, the rescinding of which is now generally desired?

"No student shall be promoted from the first term to the second or from the second term to the third, whose conditions aggregate ten (10) hours (periods) in subjects requiring preparation.

"No student shall be promoted from the third term to the fourth, or from the fourth term to the fifth, or from the fifth term to the sixth, whose conditions aggregate nine (9) hours, or if he be conditioned in three subjects requiring preparation."

21. Do you approve the following rule proposed last January by the Board of Superintendents in New York City?

"Promotion shall be made by subjects. A student shall be considered to have satisfactorily completed a subject prescribed in any term when he has attained a mark of 60 per cent. and shall thereupon be promoted in such subject."

If not, will you say why not?

22. Are you willing to be quoted as holding the views expressed in your answers to above questions?

If unwilling to be quoted, will you not kindly still give the writer the benefit of your convictions and experience on this important subject? Your wishes will be respected.

You will confer a personal favor by returning this sheet, with answers in the spaces left for them, or numbered like the questions and placed on a separate sheet, and you are especially requested to sign your name, school position, and address.

If circumstances make it impossible for you to fill out these blanks, you will confer a great favor by handing them to some one who may answer.

Please mail as soon as convenient.

Answered by .....

Position .....

P. O. Address .....

DEAR SIR:

The second report of the Committee of the Associated Harvard Clubs on the question of establishing at Harvard a three-year course for the degree of A.B. (which was submitted at the tenth annual meeting, held at Chicago, Ill., May 26, 1906, and may be secured by sending a request with a two-cent stamp for postage to Rome G. Brown, 1006 Guaranty Building, Minneapolis, Minn.) proposes an undisguised three-year college course.

"Economy in Education," an article in the *Educational Review* for September, 1905, discusses the advantages of rearranging all our quadrennial courses in triennial groups.

"Should the twelve-year course of study be equally divided between the elementary school and the secondary school?" This subject was ably discussed

by Dr. E. W. Lyttle at the latest meeting of the N. E. A., as may be found by referring to page 428 of the *Proceedings* of the National Educational Association for 1905.

In pursuing this line of thought many interesting questions arise, some of which are respectfully submitted to the consideration of a selected list of active members of the N. E. A., in the hope that the answers received may be used in the interest of education, and the co-operation of each recipient is earnestly requested to secure the best answers possible.

Will you not kindly return this blank with the spaces filled and your signature attached, or write me a personal letter expressing even more fully your experience and convictions along these lines? Even should you decline to give me the privilege of quoting from your answers to the numbered questions, I shall be grateful to know what you think.

Plan A—Present System:

Primary School .....4 years  
Grammar School .....4 years  
High School .....4 years  
College .....4 years

A Liberal Education ....16 years

Plan B—Proposed System:

Primary School .....3 years  
Intermediate School ...3 years  
Grammar School .....3 years  
High School .....3 years  
College .....3 years

A Liberal Education ...15 years

1. Do you think Plan B is an improvement on Plan A?
2. Do you think it worth while to save this year before professional study is begun?
3. Do you think the transitions in B easier than in A?
4. Would the year added to the pre-high-school period discourage more students from finishing to that point?
5. Would this additional year provide departmental study for many who do not enter high school?
6. Would you favor departmental teaching throughout the three years of the grammar school under Plan B, at least in large cities?
7. Would the nine years from the age of six till that of fifteen be too long for the period of compulsory education?
8. Would Plan B prevent many from dropping out of high school during the first year?
9. With the high-school course reduced to three years, would more students complete it?
10. Under Plan B do you think more students would go to college?
11. Which plan is prevalent in your schools?
12. What proportion of your students go to high school?
13. What proportion drop out of high school during the first year?
14. What proportion go to college?
15. Do you think the divisions in B would be easier to manage than those in A?
16. Under B could students in case of necessity discontinue their work at more convenient stages than under A?

17. Is the tendency in your community to shorten the period of preparation for life?

18. Would students under B be crowded by too much work?

19. Would the triennial period system be better for flexible advancement by subject?

20. Do you think the proposed shortening of the high-school and college courses to three years each would take anything indispensable from them, or cheapen them?

21. What objections have you to Plan B?

Answered by .....

Position .....

P. O. Address .....

## BOOKS RECEIVED

### EDUCATIONAL

- The Recitation.* Lippincott's Educational Series. By SAMUEL HAMILTON. Philadelphia and London: J. B. Lippincott Co., 1906. Pp. xi+369.
- Illinois Libraries.* The University of Illinois Studies, Vol. II, No. 1, May, 1906. By KATHERINE L. SHARP. Urbana: University of Illinois Press. Pp. 96. \$1.
- The Public Primary School System of France.* Columbia University Teachers College Contributions to Education No. 7. By FREDERIC E. FARRINGTON. New York: Columbia University, 1906. Pp. 303.
- L'Histoire dans l'enseignement secondaire: La conception nouvelle de l'histoire la méthode les instruments de travail.* Par CHARLES SEIGNOBOS. Paris: Armand Colin, 1906. Pp. 55.
- Principles of Secondary Education: A Text-Book.* By CHARLES DE GARMO. New York: The Macmillan Co., 1907. Pp. xii+299. \$1.25.
- The Making of an American School-Teacher.* By FORREST CRISSEY. Chicago: C. M. Barnes Co. Pp. 75.
- State School Systems: Legislation and Judicial Decisions Relating to Public Education, Oct. 1, 1904, to Oct. 1, 1906.* Bureau of Education, Department of the Interior, Bulletin No. 3, 1906. By EDWARD C. ELLIOTT. Washington: Government Printing Office, 1906. Pp. 156.

### LATIN AND GREEK

- Herodotus, Buch I-IV: Textausgabe für den Schulgebrauch.* Von ADOLPH FRITSCH. Leipzig and Berlin: B. G. Teubner, 1906. Pp. xlii+426; mit Titelbild. M. 2.40.
- The Mythology of Greece and Rome, Presented with Special Reference to Its Influence on Literature.* By ARTHUR FAIRBANKS. New York: D. Appleton & Co., 1907. Pp. xvii+408. Illustrations and maps. \$1.50.

### ENGLISH

- Masterpieces of Modern Oratory.* Edited by EDWIN DuBOIS SHURTER. Boston: Ginn & Co., 1906. Pp. vii+369.
- The Development of Standard English Speech in Outline.* By J. M. HART. New York: Henry Holt & Company, 1907. Pp. x+93. \$1.00.

### GERMAN

- Der deutsche Aufsatz in der Prima des Gymnasiums: Ein historisch-kritischer Versuch.* Von OTTO APELT. Zweite verbesserte Auflage. Leipzig and Berlin: B. G. Teubner, 1907. Pp. 284. M. 3.20.

*Dr. E. Bardeys Lehr- und Übungsbuch der deutschen Sprache: Vollständige Elementargrammatik.* Vierte, verbesserte Auflage von O. WEISSE. Leipzig and Berlin: B. G. Teubner, 1906. Pp. 185. M. 2.

*Methodik des Unterrichts in der deutschen Sprache.* Von ADOLF SCHULTZ. Leipzig and Berlin: B. G. Teubner, 1906. M. 3.

## SCIENCE

*Hygiene.* By J. LANE NOTTER and R. H. FIRTH. Sixth edition. New York and Bombay: Longmans, Green & Co., 1905. Pp. xiv+491. Illustrated.

*Praktischer Unterricht in Chemie, zum Gebrauch für das Laboratorium.* Von KARL SCHEID. Leipzig: B. G. Teubner, 1906. Pp. 79. M. 1.40

*A Brief Outline of My Geography Lessons.* By LEANORD WILBUR GUESS. New York: Hinds, Noble & Eldrege, 1906. With blanks to be filled in by pupil. Pp. 79.

## MANUAL TRAINING

*Elementary Woodwork for Use in Manual Training Classes.* By FRANK HENRY SELDEN. Chicago: Rand, McNally & Co., 1906. Fully illustrated. Pp. 206.

## NOTES

### THE AMERICAN FEDERATION OF TEACHERS OF THE MATHEMATICAL AND THE NATURAL SCIENCES

In accordance with the call issued by joint action of a committee of the American Society of Teachers of Mathematics and the Natural Sciences and one of the Central Association of Science and Mathematics Teachers, a meeting of delegates of a number of associations was held in New York on December 27, 1906, for the purpose of discussing the formation of a federation of associations of teachers of science and mathematics. A roll of the meeting was taken and it was found that there were present 27 delegates, representing 7 associations as follows: The Association of Mathematics Teachers of the Middle States and Maryland, 9 delegates; The New York State Science Teachers' Association (Mathematics Section), 6 delegates; The Central Association of Science and Mathematics Teachers, 5 delegates; The Association of the Teachers of Mathematics of New England, 3 delegates; The Association of the Teachers of Physics of Washington City, 2 delegates; The Missouri Society of Teachers of Mathematics and Science, 1 delegate; The New Jersey State Science Teachers Association, 1 delegate.

Professor T. S. Fiske, of the Association of Mathematics Teachers of the Middle States and Maryland, was elected chairman of the meeting, and Professor C. R. Mann, of the Central Association of Science and Mathematics Teachers, was made secretary.

After some preliminary discussion, it was, on motion, duly seconded, unanimously voted:

"That it is recommended that there be formed, by the various associations of teachers of science and of mathematics, an American Federation of Teachers of the Mathematical and the Natural Sciences."

The question of the form of the organization was then taken up. Two different forms were proposed: one, that of a single society of teachers of mathematics and the mathematical sciences, the membership to be limited to associations that publish literature and reports; the other, a rather loose federation of all associations of teachers of either mathematical or natural sciences, the membership being limited to associations that have more than fifty members. The first of these forms was that adopted by the American Society of Teachers of Mathematics and the Natural Sciences at the conference held at Asbury Park in 1905. The latter form was proposed by the Central Association of Science and Mathematics Teachers.

In the discussion of this question, the latter form of organization was shown to be less formal and more flexible, and to interfere less with the

individual activities of the associations. Because this form of federation appeared to furnish the necessary basis for a first step toward a more complete organization, and because it was considered advisable that associations not represented at the meeting should have a voice in the final decision, it was, on motion, duly seconded, unanimously voted:

"That the form of organization proposed by the Central Association of Science and Mathematics Teachers in the printed circular issued by them be tentatively adopted for the coming year, the final form of organization to be decided at the next meeting."

No officers were elected; but an executive committee, which should look after the interests of the Federation for the next year, was elected as follows: T. S. Fisk, Columbia University, Chairman; C. R. Mann, University of Chicago, Secretary-Treasurer; H. W. Tyler, Massachusetts Institute of Technology; R. E. Dodge, Teachers College, New York; F. N. Peters, Kansas City High School.

On motion, duly seconded, it was voted:

"That this executive committee have power to fill vacancies and to add to its membership by unanimous vote."

On motion, the meeting adjourned, subject to the call of the executive committee.

C. R. MANN, *Secretary*



## NEWS

New Mexico has raised the salary of county superintendent from \$900 to \$1,500.

According to the *Educational Times*, the study of French in England is steadily increasing, and that of German declining.

Signs of seeming decline of interest in classical study in England come from several sources. Not only does Mr. Benson, in his presidential address to the Modern Language Association, regard the retaining of Greek and Latin in secondary schools as an impossibility, but similar sentiments were expressed at the annual meeting of assistant masters in secondary schools. Dr. H. F. Heath stated that it might be safely said that Latin would never again be taught in lower secondary schools. He advocates the preservation of modern foreign languages in those schools; French to come first, and German to follow in two years.

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The Association of Head-Masters in England passed a resolution at its annual meeting recommending military training in secondary schools, with the provision that after the first year of disciplinary work the training should be such as would exercise intelligence—map-drawing, scouting, military history.

In the recent establishment of the new retirement fund the Philadelphia Board of Education has been more than generous. In New York this fund is supported by liquor-license fees, in Boston and Chicago by the teachers themselves; in Philadelphia alone, of all large cities, it is recognized as a legitimate claim upon school funds.

According to the *San Francisco Call*, "it is asserted by one of our well-informed consuls that the introduction of American educators and American educational methods into the Argentine Republic some years ago resulted in a revolution of that country's educational system, and that fact is held by educators to be the beginning of the latest period of national growth and development."

The *Educational News*, London, has been publishing extended accounts of American schools by Miss Margaret Fisher, of the Edinburgh schools. As

## TWO NEW BOOKS

### Moore and Miner's Practical Business Arithmetic

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In Moore and Miner's *Accounting and Business Practice* (published in 1902) the authors set for themselves a very high standard. In the opinion of critics and teachers the *Practical Business Arithmetic* has not fallen below this standard. Teachers who are seeking a usable, comprehensive, and adaptable business arithmetic will be repaid by an examination of the book.

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compared to England, she finds the United States very lavish in expenditures for sites, buildings, and equipment, though hardly coming up to the standard thus set in the salaries of its teachers. She believes that we surpass England in practical school hygiene.

The Religious Education Association, which held its fourth annual meeting in February at Rochester, N. Y., is attracting more and more notice. The *Outlook* sums up the characteristics of this association as being breadth of vision, absence of discord and controversy, and practical working contact with life. The association embraces seventeen departments, covering every grade and kind of education.

The growing interchange of teachers and inspectors of schools between England and her colonies has been commented on by Mr. E. B. Sargent, educational adviser to the high commissioner of South Africa. Hitherto the flow of teachers has been almost entirely from the older to the newer country. Mutual exchanges, such as that recently made between Natal and the Scotch Education Department, are considered advantageous to the union of the colonies and the mother-country.

The growing interest in school hygiene has been marked in Germany by a vacation course on the subject given in Göttingen, under the direction of Dr. von Esmarch, professor of hygiene. Topics treated were the hygiene of air and water, and the qualities which should be demanded of both; the schoolhouse, including location, construction, decoration, temperature, heating, lighting, ventilation, and seating. Under the latter heading the proper teaching of writing was discussed, together with the effect of position on health. This is the first vacation course in hygiene given for the western provinces of Germany, though a similar undertaking was begun four years ago in Posen at the request of the teachers in that province.

The *Zeitschrift für Schulgesundheitspflege* for January contains an account of the life and work of the late Herman Cohn, who more than any other man helped to introduce quantitative and scientific methods into the modern study of school hygiene. He was sixty-nine years old when he died, on the 11th of last September, and as shown by the table at the end of the account, during the forty-five years of his active life had written 306 articles and pamphlets. His greatest contributions were along the line of treatment for defective vision among school children. He made an exhaustive study of its causes, comparing schools of all kinds and grades for the sake of scientific accuracy. He worked untiringly for the fulfilment of his ideal: "no school without its oculist;" and most of his articles bore, directly or indirectly, on this question. These comprised, however, everything from popular discussions of size and character of type in schoolbooks, natural and artificial lighting, and general questions on school hygiene, to the more technical reports of operations. Of such operations he performed more than 8,000 during the thirty years after the opening of his clinic in Breslau.

On January 10 the *Journal of Education* published an article by Mr. Winship, entitled "A Fine Record," which mentioned as noteworthy the percentage of boys in the high school at Benton Harbor, Mich., where it is 40.4. Since then letters have been coming in from many high schools which show an even higher percentage. The highest yet given is that of Wakefield, Mass., where the boys number 43.9 per cent. of the total enrolment.

The Boston School Board has recently adopted a new principle in the organization of high schools, which has several important possibilities. The teachers of the several subjects, such as English, Latin, mathematics, in each high school are organized into a department with a head who is responsible for the general plan of the work. Six such departments have been established in each of the boys' high schools. The salary for a head of a department may begin at \$2,340 instead of \$1,500, the beginner's salary for other high-school positions, and may increase up to \$3,204. This should make it possible to secure and retain a higher class of men for these positions. It should also have a corrective influence on the general tendency in American education, which is manifest at all parts of the system, to give the more desirable salaries to administrative positions only.

